DOCUMENT RESUME

ED 363 781 CE 065 094

AUTHOR Allum, Keith F.
TITLE Finding One's Way: Career Guidance for Disadvantaged Youth. Research and Evaluation Report Series 93-D.
INSTITUTION Public/Private Ventures, Philadelphia, PA.
SPONS AGENCY Employment and Training Administration (DOL), Washington, DC. Office of Strategic Planning and Policy Development.
PUB DATE 93
CONTRACT 99-0-1879-75-053-01
NOTE 72p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS *Career Guidance; *Counseling Effectiveness; *Counseling Services; Counseling Techniques; *Disadvantaged Youth; Employment Programs; Federal Legislation; Intervention; Job Training; Models; *Noncollege Bound Students; *Program Improvement; Secondary Education
IDENTIFIERS *Job Training Partnership Act 1982

ABSTRACT

A study examined the types of career guidance (CG) opportunities that exist for disadvantaged youth. The essential elements and potential benefits of CG were identified through an extensive review of career development literature. National survey research, meta-analysis, and individual program documentation and evaluations were reviewed to determine potential and actual program effectiveness. Information on career guidance activities supported through federal Job Training Partnership Act (JTPA) funding was collected through telephone discussions with state JTPA and local Service Delivery Area (SDA) officials in 10 states. It was discovered that most CG still occurs in school systems, most school-based guidance remains geared primarily toward college-bound youth, CG available in the employment/training system is largely superficial, and existing CG services tend to go underutilized. Opportunities to expand CG through JTPA were identified, and the following recommendations were directed toward the Department of Labor (DOL): encourage and support joint ventures between the Departments of Labor and Education; explore the feasibility of developing CG projects for out-of-school youth, make CG services as comprehensive as possible, modify and expand the Youth Employment Competencies to reflect more fully the breadth of CG competencies, and strengthen the role of the Job Service in providing CG. (Contains 134 references.) (MN)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- ✓ This document has been reproduced as received from the person or organization originating it.
- ☐ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED 363 781

CE065094

BEST COPY AVAILABLE

Material contained in this publication is in the public domain and may be reproduced, fully or partially, without permission of the Federal Government. Source credit is requested but not required. Permission is required only to reproduce any copyrighted material contained herein.

This material will be made available to sensory impaired individuals upon request.
Voice phone: 202-219-7664
TDD* phone: 1-800-326-2577

*Telecommunications Device for the Deaf.

Finding One's Way: Career Guidance For Disadvantaged Youth

Research and Evaluation Report Series 93-D

U.S. Department of Labor
Robert B. Reich, Secretary

Employment and Training Administration
Doug Ross, Assistant Secretary
For Employment and Training

Office of Strategic Planning and Policy Development
Raymond J. Uhalde, Administrator

1993

Research and Evaluation Report Series

The Research and Evaluation Report Series presents information about and results of projects funded by the Office of Strategic Planning and Policy Development (OSPPD) of the Department of Labor's Employment and Training Administration. These projects deal with a wide range of training, employment, workplace literacy, labor market and related issues. The series is published under the direction of OSPPD's Dissemination Unit.

This report in the series was prepared by Public/Private Ventures (P/PV), of Philadelphia, under Department of Labor Contract No. 99-0-1879-75-053-01. The author is Keith F. Allum, a P/PV research officer.

The report is one of several products resulting from the Department of Labor-funded Youth Research and Technical Assistance Project, the prime contractor for which is Brandeis University, of Waltham, Massachusetts; P/PV is the subcontractor. OSPPD's project officer for the project is Patricia A. Taylor.

Contractors conducting research and evaluation projects under Federal sponsorship are encouraged to express their own judgment freely. Therefore, this report does not necessarily represent the official opinion or policy of the Department of Labor.

Acknowledgments

A debt of gratitude is owed to staff and participants of the exemplary programs we visited. In offering us the opportunity to observe their programs in action, they displayed great hospitality, candor and wisdom. The four programs visited were City-As-School, DeLaSalle Education Center, Maryland Tomorrow/Project Success and PRO-100.

In preparing the report, many scholars, specialists and program officers were consulted; they were exceptionally generous with their time and expertise. While they are too numerous to name here, their valuable input is greatly appreciated.

Preparation of this report would not have been possible without the thoughtful contributions of Gary Walker and Thomas J. Smith. Its completion would not have been possible without the tireless efforts of Maxine Sherman.

The analysis was greatly enriched by the fieldwork and insights of two P/PV researchers, Mary Moorhouse and Michelle Alberti Gambone. Dr. Gambone also provided invaluable guidance in preparing the report. Special thanks go to Dara Carr, who analyzed the NELS data and provided considerable research assistance. Technical assistance was provided by Angela Everman and Frank Ertl.

Appreciation is also extended to Jenifer Marquis for her timely assistance in processing the final draft, and to Hilda Rodgers and Carol Eresian, who provided their proofreading skills. The final report was greatly enhanced by the editorial input of Natalie Jaffe, the copy editing of Michael Callaghan and the overall design work of Robert Henry.

Contents

I. **Introduction** 1
Scope of Work 3

II. **Defining Career Guidance** 5
Defining the Terms 5
Models of Career Guidance 7
The Essential Components of Career Guidance 9
Career Guidance Interventions: Process and Promise 12

III. **Current Career Guidance Services** 15
School-Based Career Guidance and Counseling 16
Career Guidance in Employment and Training Programs 26
Evaluation and Evidence of Effectiveness 28
Career Guidance Program Site Visits . 33
Implications of Career Guidance Research for JTPA Youth Programming 35
Summary 37

IV. **Findings, Opportunities And Recommendations** 41
Findings 42
Opportunities to Expand Career Guidance Through the JTPA 45
Recommendations 46

BIBLIOGRAPHY 51

Tables

1. NON-USE OF CAREER GUIDANCE RESOURCES BY STUDENTS 19

2. AVAILABILITY OF COUNSELING AND VOCATIONAL CLUBS TO EIGHTH-GRADERS 22

3. EIGHTH-GRADERS REPORTING THEY TALKED ABOUT JOBS/CAREERS 22

4. EIGHTH-GRADERS REPORTING THEY TALKED ABOUT JOBS/CAREERS BY SOCIOECONOMIC STATUS 23

5. AVAILABILITY OF SCHOOL-BASED CAREER, VOCATIONAL AND OCCUPATIONAL RESOURCES 25

6. TENTH-GRADE STUDENTS' USE OF SCHOOL-BASED CAREER/ OCCUPATIONAL RESOURCES 25

7. EVALUATION STUDIES OF PROGRAMS INCORPORATING ELEMENTS OF CAREER GUIDANCE 32

8. SUMMARY OF CAREER GUIDANCE PROGRAMS VISITED AS PART OF THIS STUDY 34

9. CORRESPONDENCE BETWEEN JTPA-DEFINED PREEMPLOYMENT AND WORK MATURITY COMPETENCIES AND THOSE IDENTIFIED BY NOICC 38

I. Introduction

Over the past two decades, profound transformations in the labor market have reverberated through the institutions that prepare individuals to enter and succeed in it. Growth in new sectors of the economy, changes in job structure, new skill requirements and rising educational and training prerequisites challenge education and employment/training systems to provide their clients with timely and accurate information and assistance in planning for their futures. Growing numbers of adult workers will experience multiple career changes as the economy and labor market continue to evolve. Nevertheless, the initial transition from school to work can still be considered the most critical.

Individuals need knowledge and skills to help them successfully negotiate the series of educational and vocational decisions that affect their progress toward a productive career. One of the primary mechanisms for providing individuals with the information and skills they need is career guidance. Career guidance seeks to help individuals learn about their options, explore their interests and develop plans to achieve their occupational goals.

However, in a 1989 survey, nearly two-thirds of working Americans reported that they would seek more information about career options if they were starting their careers over again.[1] About half believed that most Americans lack the skills needed to interpret and use available information to make intelligent career decisions. Yet fewer than one in five reported that they had sought or obtained career guidance from a school or college counselor.

A call for expansion and improvement of career guidance services has been made by numerous professional, educational and governmental agencies.[2] A number of experts and practitioners consulted in the preparation of this report share the Business Advisory Commission's (1985:26) judgment that "young people today need more and better guidance than ever before."

Given the many challenges associated with adolescent development and the vagaries of the changing labor market and economy, it should be obvious that youth, especially, need guidance in managing the process of career development (Herr and Cramer, 1992; Walsh and Osipow, 1990). College-bound students receive the lion's

1. Survey conducted by the Gallup Organization for the National Career Development Association.
2. Among the most prominent are the National Alliance of Business, 1986; the National Commission on Secondary Vocational Education, 1985; the Business Advisory Commission, 1985; the Research and Policy Committee of the Committee for Economic Development, 1985; the Commission on Pre-College Guidance and Counseling, 1986; The William T. Grant Foundation, 1988; the U.S. Department of Labor, 1989; the Educational Testing Service, 1990; the National Career Development Association, 1991; the Council of Chief State School Officers, 1991; and the American Counseling Association, 1992.

share of guidance resources in our public schools, but the need for immediate and realistic plans of action is at least equally great for young people who will make the transition to full-time employment directly from high school. The need for information, counseling and direction is perhaps the greatest among those considered at risk (W.T. Grant, 1988).

About 32 million people in the United States today are between the ages of 16 and 24.

> *As they face the critical transition to adulthood, these young people are at very different stages in their education and preparation for entering the labor force. Most will negotiate the transition successfully; they will become employed. But up to one-third of some population groups will fail to overcome the obstacles to making that transition. These youth are therefore "at risk" of facing a life of chronic unemployment, welfare dependency and other social problems. In short, they may be unable to fulfill their potential to lead productive lives (Smith et al., 1988:9).*

Federally funded employment and training programs, including those sponsored under the Job Training Partnership Act (JTPA), have traditionally used economic indicators as criteria for eligibility. In these systems, economic disadvantage serves as the defining measure of "at risk." However, a wide variety of other factors can also contribute to the failure to move successfully from school to work. The following are widely accepted as major contributors to risk: dropping out of school, lack of basic academic skills, teenage parenthood, history of substance abuse or criminal record.[3] The negative effects of these risk factors can engender additional disadvantages--poor work habits, attitudes and interpersonal skills--that further complicate the transition to productive, steady employment.

Disadvantaged youth face other constraints to realistic career decisions as well. For example, these youth often lack the informal information sources and networks that other young people use to learn about jobs and careers. Without sound information sources in their families and neighborhoods, disadvantaged youth may turn to unrealistic and misleading sources, such as television or equally bewildered peers (Reisner and Balasubramaniam, 1989). Structured career guidance programs offer vehicles for opening access to human and institutional resources, ensuring multiple levels and types of reinforcement, exploiting those opportunity structures that exist and exploring new ones.

Because disadvantaged youth disproportionately exposed to risk factors are the fastest growing segment of the work force (Lerman, 1992; Johnston and Packer, 1987), it is clear that the problems they face seriously challenge the health of the nation's

3. New (1992-93) regulations require that at least 65 percent of the youth served by JTPA face at least one of these additional barriers to employment.

economy. In fact, in a recent survey, minority youth, who are disproportionately disadvantaged themselves, identified a need for career information and guidance as a pressing concern (Brown et al., 1991). Among other things, people of color:

- Viewed themselves highly in need of career development services;
- Were more likely than whites to want more information about careers;
- Needed assistance with occupational information and career decision-making; and
- Recommended greater focus on career development in schools.

Scope Of Work

The Department of Labor (DOL) asked Public/Private Ventures (P/PV) to review the types of career guidance opportunities that exist for youth, especially disadvantaged youth; to analyze the effectiveness of these various interventions; and to propose ways in which they might be strengthened.

Toward that end, this report addresses the following four issues:

1. The essential elements of career guidance;
2. The potential benefits of career guidance programming, especially with respect to JTPA-eligible youth;
3. The current configuration of career guidance services and the manner in which they reach the JTPA-eligible population; and
4. The implications for future DOL initiatives in light of new JTPA legislation and regulations.

The essential elements of and potential benefits from career guidance were identified through an extensive review of the literature in the field of career development. Published books and journal articles were supplemented by recent national reports, public policy statements and National Occupational Information Coordinating Committee (NOICC) documents.[4] National-level survey research, meta-analyses and individual program documentation and evaluations were reviewed to determine potential and actual program effectiveness.[5]

---

4. NOICC is a federal interagency committee that promotes the development and use of occupational, career and labor market information. It represents 10 agencies within the Departments of Labor, Education, Commerce, Agriculture and Defense.
5. This review is described more fully in Chapter III.

In order to outline the role played by the education system in career development for youth, we examined national-level information on guidance and other career-related services in the schools. A historical perspective was obtained through an examination of published reports based on national surveys. For a contemporary picture, we conducted a secondary analysis of the National Educational Longitudinal Study (NELS). For our analysis, we used the 1988 base-year and 1990 first follow-up data sets. NELS provides detailed demographic and educational information on a cohort of students in the eighth grade, and contains questions on counseling services and their use, collected at both the student and school level. Examination of individual program documentation and evaluations, and consultation with recognized experts in the field, provided more detailed information about current practices.

To obtain a picture of career guidance activities supported through federal JTPA funding and their subsequent delivery through local Service Delivery Areas (SDAs), we collected data through telephone discussions with state JTPA and local SDA officials in 10 states.[6] These states were selected because the SDAs are part of a network of replication sites of the Summer Training and Education Program (STEP) overseen by P/PV. The states represent geographical distribution, and in Program Year 1991 accounted for about 50 percent of JTPA findings. In each of the 10 states, we spoke with one state JTPA official and representatives from two SDAs. While this small and strategically selected sample may not be representative of the entire system, it provides a fairly broad cross-section of current JTPA-funded career guidance activity, and our discussions were intended to obtain only a sampling of types of career guidance activities rather than information sufficient for generalization. A recent study of SDA activities conducted by Berkeley Planning Associates and P/PV, supplemented by site visits to a sample of recognized exemplary programs, provided additional insights into the structure and content of JTPA programming.[7]

The remainder of this report is organized as follows: Chapter II provides an introduction to career guidance, its essential components and their relevance to programming for disadvantaged at-risk youth. Chapter III presents an overview of the career guidance landscape: what is out there, what works and what is accessible to the disadvantaged population. Chapter IV discusses the policy implications of the report's findings and offers recommendations for improving employment and training programs through the addition and expansion of career guidance services.

---

6. The states are California, Florida, Illinois, Massachusetts, Michigan, New York, Ohio, Pennsylvania, Tennessee and Texas.
7. This study was conducted under contract for the DOL.

II. Defining Career Guidance

Central to the case made in this report is the concept of career. Clearly, career is more than one's current job or occupation. It is the link between **what** people do and **how** they see themselves (Raynor and Entin, 1982). Super (1976:4) defines career as "the sequence of occupations and other life roles which combine to express one's commitment to work in his or her total pattern of self-development."

Hence, interventions that take seriously the notion of career concern themselves with the development of human potential over the long term. Guidance activities can range, therefore, from simple awareness and exploration to career planning, hands-on experience and training, and will culminate in placement. For many, this process will repeat itself many times over the life course.

But despite the recognition that career planning is a long-term process, youth--when they receive any assistance at all--typically receive "one-shot" assistance in late adolescence, designed only to help them find their first job. However, specialists in guidance and counseling argue that "there should be some form of career development occurring somewhere everyday," beginning no later than the middle grades.[8] Once out of school, at-risk youth's access to such assistance is severely limited, particularly if they are employed in the secondary labor market.

Defining The Terms

The terms career development, career guidance and career counseling are often used interchangeably. While they are closely related, there are critical differences among them.

Career development is the most inclusive term. It refers not to an intervention but to the object of intervention. It is the process by which one develops and refines self- and career identity, work maturity and the ability to plan. It represents, then, all the career-related choices and outcomes through which every person must pass (Herr and Cramer, 1992).

Career development might usefully be considered an integral part of adolescent development. It is tightly linked to issues of self-reflection, self-evaluation, self-de-

8. Personal conversation with Tina Ammon, Arizona Department of Education, August 10, 1992.

velopment and identity formation (Super, 1976). Indeed, career development is generally conceived as "a lifelong process through which individuals **come to understand themselves** as they relate to the world of work and their role in it" (NOICC, n.d., p.2, emphasis added).

Career guidance, on the other hand, **is** an intervention. Intended to assist individuals to manage their career development (Herr, 1979), career guidance is a systemic program of counselor-coordinated information and experiences (Herr and Cramer, 1992). A more detailed description is offered by the Commission on Pre-College Guidance and Counseling (1986:4):

> *Guidance consists of support services to help students gain understanding of their social, intellectual, and emotional development; become knowledgeable about educational, occupational, and social opportunities; learn decision-making and planning skills; and combine these insights into personal plans of action.*

Thus, the ultimate goal of a career guidance program is to provide individuals with the knowledge and skills needed to develop realistic career plans and make the appropriate decisions to carry out these plans.

A number of career guidance services and activities can be offered to individuals to help them reach this goal. Myriad combinations of these processes can be found in current career guidance programs, practiced to varying degrees of intensity and effectiveness:

- **Outreach** alerts students to services.
- **Classroom instruction** provides an integrated set of planned and sequential curricular activities.
- **Counseling** helps students explore personal issues and apply information and skills to personal plans, and may be offered individually or in small groups.
- **Self-assessment** provides students with a clearer understanding of their values, skills, abilities, interests, achievements, aspirations and needs.
- **Career information**, easily accessible, current, relevant and unbiased, provides a solid framework on which to base decisions.
- **Exploration activities** are experiences designed to broaden horizons, test interests and stimulate career planning.
- **Work experience** offers opportunities to test decisions and develop effective work abilities and behaviors.

- **Career planning** activities help youth learn the skills needed to make decisions and understand the future impact of choices.
- **Placement** services help youth make the transition to school, work or the military.
- **Referrals** to other professional services allow youth to obtain assistance beyond the scope of the program.
- **Follow-up** activities provide opportunities to maintain contact and track progress.

Career counseling, the third component on the list, is one service that many practitioners consider indispensable. Career counseling is primarily the communication that takes place between guidance professionals and their clients concerning issues of preferences, competency, achievement, self-esteem and the array of factors that facilitate or inhibit personal planning. This should not be confused with job counseling, which has a narrower focus--on specific jobs rather than career choices--and which is often practiced in employment and training programs.

Models Of Career Guidance

In the broad conception of career guidance, the goal is to assist individuals in mastering those competencies that provide them with the knowledge and skills needed to successfully negotiate a series of educational and vocational decisions leading to a productive career. In practice, career guidance strategies have been influenced by several competing theories.

Formal models of career guidance can be traced back more than 80 years to Frank Parsons's work on unemployed school-leavers. In his 1909 book, ***Choosing a Vocation***, Parsons identified three factors essential to career decision-making: (1) self-understanding; (2) occupational information; and (3) the ability to draw relationships between the two. These three factors have set the direction and parameters of the field for the past eight decades.

A number of disciplines, including economics, psychology, sociology and social psychology, have made contributions to the field of career development. As a result, many approaches, representing a wide range of intellectual perspectives, have been proposed.[9]

A full review of these is impossible here, but the two major approaches and their fundamental distinctions can be stated briefly.

---

9. These approaches include trait-factor, person-centered, psychodynamic, social learning and developmental (cf. Ginzberg, 1972; Osipow, 1973; Super, 1976; Krumboltz, 1979; Crites, 1981; Yost and Corbishley, 1987; Walsh and Osipow, 1990; Spokane, 1991).

Trait-factor/psychodynamic approaches assume that individuals possess stable personal traits (interests, talents, intelligences, etc.) while each occupation requires different factors for successful performance. The goal for counselors, then, is to match intrinsic personal traits with the demands of various jobs. These approaches can be traced to Parsons's original formulation. His "Test-and-Tell" model (where counselors "test" for traits, then "tell" clients what to do) pervades much career guidance practice to this day.

Developmental approaches emphasize the individual's growing maturity in matching his or her self-concept to concepts of vocational opportunity over the life course. Hence, these approaches stress the **process** of career development rather than the **event** of choosing a career. In practice, developmental strategies seek to help the individual mature in his or her personal and career development. Implicit in this approach is the notion that adolescents have differential rates of maturity that demand varying levels and forms of intervention.

For the most part, trait-factor and psychodynamic theories are descriptive rather than explanatory (Osipow, 1973), and concentrate on occupational choice rather than career development. Unlike the developmental models, they tend to view the individual as passive and ignore the fact that the interests and skills of the individual and the demands of the workplace change over time. Moreover, critics of the trait-factor approach decry the lack of attention given to the dynamic interaction between work and nonwork aspects of life and to the individual's prior history (Sonnenfeld and Kotter, 1982, in Vondracek et al., 1986:3).

In contrast, developmental career models have increased in complexity as more ideas from developmental theory have been applied to career behavior across the life span (Walsh and Osipow, 1990). A developmental scheme provides a flexible and sophisticated framework for examining the role and effects of career guidance. For these reasons, leaders in the field of career guidance increasingly embrace a developmental perspective (Herr and Cramer, 1992).

A significant issue implicit in the contrasting approaches is that career guidance can be construed in at least two different ways: as a treatment or as a stimulus (Crites, 1969:22). Treatment refers to interventions designed **to correct** an unfavorable condition. Stimulus refers to strategies designed **to prevent** or preempt such conditions. While not mutually exclusive, these two viewpoints represent differing approaches to addressing the developmental needs of youth. In general, federally funded employment/training programs have adopted a treatment approach. Developmental approaches suggest that the career development needs of disadvantaged youth might be better met through services that take a preventative approach, heading off difficulties before they arise.

Taken together, the various theories lead to a few fundamental conclusions: career development is a process that leads to decisions; there are stages through which one

passes en route to career maturity and decision-making; there are a set of tasks and competencies that must be accomplished at each stage; and personality traits as well as environmental constraints influence one's development, aspirations and chosen career paths. In turn, these conclusions have implications for the structure and delivery of career guidance and counseling. The next section outlines the essential aspects of a comprehensive career guidance program.

The Essential Components Of Career Guidance

Career guidance is a systemic set of interventions aimed at successful career development, which, in the case of youth, coincide with the broader issues of growth and maturation associated with adolescent development.

Despite varying trends in a voluminous literature spanning numerous disciplines and several decades, there is widespread agreement that career guidance, properly implemented, addresses three broad competency areas involved in the career development process.[10] Ideally, career guidance programs will enhance:

1. Self-knowledge and self-awareness: conscious examination of personal values, interests and goals;

2. Educational and occupational exploration: presentation and integration of information and experience; and

3. Decision-making and career planning: understanding the interrelations between the self and the world, and developing skills to make realistic choices and rational decisions.

Career guidance programs are considered comprehensive if they address all three of these domains; each is covered in turn.

Self-Knowledge

A comprehensive career guidance program helps youth attain a fundamental understanding of who they are while they tackle the issues of what they want to become. Many programs that claim to provide career guidance to adolescents, especially those not based in schools, neglect this critical interaction. The dynamic nature of the career development process requires structured opportunities for youth to reflect on their exploratory experiences.

---

10. Descriptions of these competency areas abound in the academic, public policy and practitioner literature (see especially Commission on Pre-College Guidance and Counseling, 1986; Hoyt, 1991b; and American Counseling Association, 1992). Many of these sources have been synthesized by the NOICC and disseminated in the form of ***The National Career Development Guidelines***.

Through the development of self-knowledge, individuals simultaneously increase their awareness of their own interests, aspirations, aptitudes, abilities and values, and an understanding of how they relate to those of others. Individuals may acquire self-knowledge with the help of numerous assessment instruments (e.g., interest inventories, work maturity tests), through personal or small-group counseling, or through self-guided reflection exercises. Increased self-knowledge allows youth to become more self-directed, accept responsibility for their own behavior and develop positive interpersonal skills. Deficiencies in self-knowledge hinder youth from using subsequent career information and experience effectively to establish and accomplish realistic career goals.

The process of building self-knowledge coincides with Ginzberg's (1972) developmental model, which posits three stages in the progress toward authentic self-understanding: in the fantasy stage, career horizons are limitless; in the tentative period, the child begins to be interested in certain activities; during the realistic period, the youth makes interim choices and moves toward a particular occupational area. The crucial point suggested by developmental theory is that progression through each stage depends equally on knowledge of one's self **and** the occupational world.

Career guidance programs may be characterized as developmental **only** if they are organized around a sequence of age- and stage-appropriate services and activities. This requires an intensive effort on the part of school staff and may be accomplished in a number of ways. Some schools have designated a new type of counselor to focus on personal and emotional matters, while career counselors focus on postgraduate plans. These new personnel help guide adolescents through the developmental phases outlined above in preparation for future planning. Another approach is to redefine teachers' roles to include more counseling responsibilities; still another is to use community mentors and counseling staff in community-based organizations (CBOs) to provide assistance in non-school settings.

Educational and Occupational Exploration

Too often, career guidance has been inaccurately equated with the opportunity to explore occupational information (i.e., facts about what work options exist and what people do at work). Consequently, the fallacious argument is made that career guidance is readily available in libraries and resource centers (e.g., government reports, source books, directories, brochures, catalogs, listings and computer data bases). Although it is an essential element, information alone does not constitute career guidance.

Opportunities for broad career exploration are equally vital. Youth need, but often lack, the chance to explore a wide range of viable career paths along the continuum--from high-visibility, high-status professions to technical occupations to skilled labor. At-risk youth in particular need to learn more about demanding and well-paid occupations that offer accessible avenues of upward mobility (i.e., attractive middle-

range jobs). Their choices are often limited not by their imaginations but by their lack of exposure to the vastness of the world of work (W.T. Grant, 1988:53).

This component of career guidance also seeks to provide a clear understanding of the benefits educational achievement has for career opportunity. The connection between education and employment has been documented time and again--however, so has the lack of appreciation youth have for this fact. For example, only 2.2 percent of the 37,500 17-year-old boys and girls participating in a National Assessment of Educational Progress (NAEP) study considered school or academic activities to be useful for a job (Mitchell, 1977; cited in Herr and Cramer, 1992:409-410). Remarkably, students were unable to link academic learning to future job performance.

According to Mitchell, the principal resource cited by youth for job information was direct firsthand observation. Less frequently cited were reading publications or personnel office materials. Only about 25 percent reported that a career counselor was among their top five sources of information. Further responses indicate that students are not sufficiently aware of alternative sources of job information or how to access them.

McKinlay and Bloch (1989), in a study examining the relationship between career guidance and dropout rates, surveyed more than 700 career information coordinators. Asked to cite the major cause of dropping out, 62.5 percent of the sample chose "Psycho-Social Development," an area defined to include lack of goals or career plans, lack of motivation and poor self-concept--all of which are addressed by comprehensive career guidance programs. Work by Borus and Carpenter (1984) and Sewell et al. (1981) has shown that knowledge of the labor market and career maturity were also negatively correlated with dropping out.

Through a guided exploration of educational and occupational paths and opportunities, youth acquire: (1) a deeper understanding of how their roles as students, citizens and workers interrelate; (2) a greater awareness of the nature and structure of the world of work and the major trends affecting our economy; and (3) skills required for seeking, obtaining, keeping and advancing in a job.

Decision-Making and Career Planning

The presence of this component truly distinguishes a comprehensive career guidance program. Personal exploration and the transmission of knowledge play essential roles in the mix of multifaceted services that comprise a career guidance system. However, youth need not only to learn about the wider world, they need help stepping into it. Ultimately, career guidance seeks to build the decision-making skills that allow youth to establish realistic career objectives based on a rational analysis of available information, and to plan the action necessary to achieve them.

Most adolescents are at a stage in life when they are preoccupied with their immediate needs rather than the broader world around them. Nevertheless, they are making critical decisions that will have lasting effects on their own lives and the lives of their families (McKinlay and Bloch, 1989). According to Charner and Fraser (1987:11-12), "The temporary 'kid's jobs' that provide spending money and help shape young people's work habits will not support a family, and they provide only partial preparation for or access to the jobs that will."

These adolescents will soon leave youth-serving institutions and begin operating in the adult world. As graduation approaches, their immediate choices may appear simple--get a job, join the armed services, go to college. But choosing wisely means thinking seriously about what they can and want to do with their lives.

Martin Katz, a senior researcher at the Educational Testing Service (ETS), has commented that youth "often don't know what information they need, don't have what information they want, or can't use the information they have." He argues that a true career guidance system provides them with the tools needed to be planners and decision-makers (Chapman and Katz, 1981:252).

Viewed from this perspective, **career guidance seeks to train youth in a paradigm of decision-making in which obtaining and assessing information plays a central role**. It is not simply the sharing of that information.

Career Guidance Interventions: Process And Promise

Comprehensive approaches to career guidance and counseling can provide either prevention or treatment, depending on when in the developmental process the interventions take place. While current research advises intervention as early as kindergarten, to ensure appropriate support throughout a youth's development, the focus of this report is on youth in the 14 to 21 age range and covers both prevention and treatment strategies.

Youth will inevitably arrive in programs, whether in school or out, with differing levels of career maturity reflecting their unique combination of biological, environmental and social circumstances. Therefore, the range and intensity of career guidance interventions must also differ (Niles and Herr, 1989, in Herr and Cramer, 1992:415-416). Youth who lack maturity will need to acquire the vocabulary, self-awareness, career awareness and exploratory experience that might have been expected to occur earlier. More intensive "treatment" is needed when youth, even after being provided with information and exploratory experiences, are still unable to make a choice or a commitment to some plan of action (Crites, 1981).

As noted earlier, career guidance encompasses a wide range of activities and services designed to manage the career development process. It is widely accepted that effective delivery of career guidance and counseling services requires a team approach involving school-based personnel, parents, governmental agencies, CBOs and the business community (Herr and Cramer, 1992; W.T. Grant, 1988). Regardless of who is involved, the process is labor-intensive, requiring extensive personal interaction and counseling; this has serious implications for attempts at widespread replication.

Developmental models of career guidance that take a comprehensive view of the process contrast markedly with the matching models of the past and the focus on job-skills training of the present (Super, 1983; Herr and Cramer, 1992:589). Multiple strategies embedded in multicomponent programs are seen as necessary if programs are to address the multiple problems faced by minority and disadvantaged youth.

A successfully implemented comprehensive career guidance and counseling program with these components would:

- Reduce individual risk by increasing school and program retention rates, promoting higher self-esteem and improving social adjustment;
- Better prepare individuals for the changing workplace by increasing their understanding of the relationship between education and employment and by improving their career decision-making skills;
- Support educational excellence by increasing motivation and improving academic achievement;
- Promote program coordination and articulation by defining a sequence of delivery for program outcomes and reinforcing learning from previous levels;
- Enhance family and community involvement by helping parents and concerned adults understand how they can assist their children with career planning; and
- Increase program accountability through regular assessment of student or client achievement and evaluation of program components related to student achievement.

Career guidance has a significant potential to help reduce the correlation between membership in disadvantaged social groups and failure in the workplace. At-risk youth already have one or two strikes against them (poverty, substance abuse, teen pregnancy, lack of motivation, lack of basic academic skills, etc.). Unlike the college-bound, work-bound youth need immediate and realistic career plans for their lives after high school.

Comprehensive career guidance programs may provide benefits that are of special importance to the development of at-risk youth. In particular, career guidance programs are designed to perform the following functions:

1. Provide youth with opportunities for personal growth by forcing critical examination of self-image and self-identity, and helping youth gain motivation, focus their ambition and identify goals;

2. Increase cognitive information about education and occupations by highlighting the importance of education for one's future and by enhancing the number and quality of social experiences beyond the classroom in the community and workplace; and

3. Provide positive relationships with adults that offer exposure to working role models and contribute to building networks of contacts.

The next chapter examines the availability and effectiveness of career guidance programs currently in place within schools and employment and training systems.

III. Current Career Guidance Services

Now that we have delineated the essential elements of a comprehensive career guidance program, we must look at what career guidance programs actually offer in today's public schools and employment/training programs for out-of-school youth. We ask:

- What services and programs are available to youth?
- Which of these services do they take advantage of?
- What can be determined about the effectiveness of career guidance programs?
- What do effective programs have in common?

National surveys, reports and data sets indicate that a substantial amount of career guidance activity takes place, and there is evidence to suggest the amount is increasing. However, the same sources indicate that in practice, career guidance takes many forms, most of them very limited. In order to provide a framework for designing comprehensive programs, this chapter reviews findings about the availability and use of the components of career guidance, first in school-based programming, then in other programming.

A critical look at available sources of information leads to the following conclusions:

- Typical programs in the field seldom resemble the fully integrated, comprehensive career guidance called for by reformers and described in the preceding sections.
- School-based programs are more likely than out-of-school programs to contain multiple elements of career guidance.
- Evaluations of the better articulated and structured models tend to find positive relationships between intervention and outcome, but suffer from methodological shortcomings that render them useless beyond that general finding.
- Students in schools with high concentrations of disadvantaged youth tend to have greater access to vocational, occupational and career services than do students in wealthier schools, though these services are of questionable quality and may be in-

dicative of the tendency to track disadvantaged youth into vocational courses of study.

- The research consistently indicates that youth with lower socioeconomic status regularly seek career development services.

- Youth who have left the school system have access to training and job counseling mainly through JTPA-funded programs that officials and practitioners in the field often misconstrue as career guidance due to their tendency to apply the term to virtually any service or activity that addresses employment or job training. In fact, out-of-school youth have limited access to real career guidance.

- Even exemplary employment and training models often do not offer a full range of career guidance services. As they are currently configured, programs tend to provide a narrow band of preemployment skills and specific job training in an effort to promote immediate employment gains rather than long-term career development.

School-Based Career Guidance And Counseling

No systematic data have been collected on the availability, use or effectiveness of career guidance services in the nation's school system (Barton, 1990). However, P/PV's reconnaissance of currently available career guidance programming found that fully articulated, comprehensive career guidance programs have been implemented in only a small number of schools in selected states. Reported results from such programs offer preliminary indications that they hold the potential to have important impacts on the school-to-work transition.[11]

Service Availability and Use

In 1975, Willard Wirtz noted a consensus among educational observers that guidance and counseling are the weakest links in the school-to-work transition. Contemporary observers do not find much evidence to dispute this perception:

> *School counseling is the wailing wall of American education. It is a perennial target for criticism by both insiders and outsiders. Outsiders complain that it is ineffective, biased, and a waste of money. Insiders complain that the number of students per counselor and the weight of their non-counseling administrative duties render their task impossible (W.T. Grant, 1988:54).*

---

11. Evaluative data from a sample of six comprehensive school-based career guidance programs were obtained from the following school systems: Churchill H.S., Eugene, Oregon; Moore Public Schools, Moore, Oklahoma; El Cajon Valley H.S., El Cajon, California; Neptune Township Public Schools, Neptune, New Jersey; Harrisburg H.S., Harrisburg, Oregon; and Mesa Public Schools, Mesa, Arizona.

The majority of career guidance services that do exist are found in school systems, as evidenced by the location of Career Information Delivery Systems (CIDS). NOICC defines CIDS as a computerized career information and guidance system sponsored and/or supported by the state affiliates of NOICC. While the number of CIDS sites in state Job Service offices, employment and training agencies and vocational rehabilitation service offices is growing, the majority are still located in schools and colleges. In a survey of all 50 states (Hopkins et al., 1992), NOICC found that 66.2 percent of all CIDS were in K-12 education settings. Only 12.3 percent were located in employment and training settings. Another 12.4 percent were located in libraries, correctional facilities, military bases and youth service bureaus.

An indirect measure of which career guidance components are addressed in educational settings is presented by Splete and Stewart (1990). They analyzed the abstracts of more than 1,500 citations in the ERIC data base that cited competency-based career development programs between 1980 and 1990.[12] The citations were coded according to which of the three major competency areas of comprehensive career guidance were addressed--self-knowledge, educational and occupational exploration, or career planning. They found the overwhelming majority of programs, 82 percent, addressed the educational and occupational exploration competency. Only 18 percent and 45 percent, respectively, addressed the competencies of self-knowledge and career planning.

These findings tend to confirm that the vast majority of career guidance activities revolve around the provision and exploration of career information and its relationship to education. Career planning as a fundamental tenet of career guidance is apparently neglected in over half of the programs cited. The small percentage of programs addressing self-assessment and self-knowledge verifies the fact that few students receive the services and guidance needed to master these competencies. Fully formed career guidance programs are a rarity in American K-12 school systems (Coy, 1991).

Findings from Two Early Studies

In 1981, ETS published ***A Survey of Career Information Systems in Secondary Schools***, coauthored by Warren Chapman and Martin Katz. Perhaps the most comprehensive survey of its kind, this study (cosponsored by the National Institute of Education and NOICC) created a baseline of solid information that can be used to examine the availability of career information and counseling in schools. The data, collected in 1980, found that the vast majority of schools did have a full-time counselor on staff: only 6 percent had no counselor or full-time equivalent.

12. Educational Resources Information Center (ERIC), sponsored by the Office of Educational Research and Information, is the world's largest educational data base and offers a number of products and services to the research community, including monthly abstract journals and computerized bibliographic searches.

However, career planning and job placement occupied the **least** amount of the counselors' time. Only one out of four surveyed said they spent more than 30 percent of their time on career planning; and only 4 percent of the counselors said they spent that much time on job placement. More significant, **almost half of all inner-city students had never talked with a counselor about occupations or careers.**

The ETS study went on to explore the differential availability and quality of career information resources in a cross-section of diverse schools. They found that while a wide variety of resources were available, the most common category cited was "bound references," found in 98 percent of the schools.[13] The most common single resource found in schools was the ***Occupational Outlook Handbook***. Ninety-two percent of the schools had one or more copies of this unwieldy resource, though it is unclear whether all these volumes were up-to-date.

When asked about the quality of the information contained in these resources, counselors, not surprisingly, identified the ***Handbook***--the most frequently present resource--as the single best resource. Of schools having each type of resource available, however, computer systems were most frequently selected as offering the highest quality.

Consistent with their extensive availability, the most frequently **used** resources were publications, especially reference books, used "at least a few times" by over 40 percent of students. Observing that the majority of career information was textual, the counselors were asked to name a resource that would "enable poor readers to get information about occupations;" 28 percent were unable to designate one available to their students. The ETS researchers also cite compelling evidence that **students did not avail themselves of the potential resources that were available.** (See Table 1.)

Students in high-poverty areas were found to have talked more with counselors about where to get a job, while students in wealthier areas had greater access to and were more likely to use computerized systems. Students were generally more concerned with hard facts (e.g., immediate prerequisites for entry to jobs, expected earnings, job activities) than with long-range planning. Responsibility for maintenance of and formal contact with career information resources was assumed mainly by the guidance professionals. However, one-third of the schools had no acting director or head of career guidance. Less than 30 percent of the schools had an established committee to review occupational information resources. The overwhelming majority of schools that had computerized systems had only one or two terminals, further limiting accessibility.

---

13. Responses were classified into 13 categories (e.g., publications, computerized systems, audiovisual materials, contacts with school staff, coursework, school-arranged experiences, etc.).

Table 1

NON-USE OF CAREER GUIDANCE RESOURCES
BY STUDENTS

Type of Resource	Percentage of Students Claiming They Never Used This Resource
Reference books	20
Magazines	25
Pamphlets, briefs	33
Sorting cards	33
Films or videotapes	39
Computer-based systems	50
Microfiche	50
Talk with counselor	50
Course in career planning	50
Attended career day	60

Source: Chapman and Katz, 1981.

In general, the ETS study found that students tended to use a range of career planning resources beyond those available in the school--for example, in the local library, career center, state employment office, college, employment agency or military recruiting office. Most students claimed that their school's resources were insufficient. For example, only 30 percent of schools offered access to a career center, and only 16 percent of students had ever used one. On the other hand, 60 percent of the students had gone to the library to get occupational information.

For many students, informal external resources provided **all** their occupational information. These resource people included relatives, friends, former students, employment service personnel, employees, employers, college admission officers and military recruiters. Parents and friends were cited as the most powerful motivators for initiating a search for career information. Students talked with them far more frequently than with anyone else, though they may not have played a prominent role in providing specific information.

Using an instrument developed by the American College Testing Program to collect data from a national sample of eighth- and 11th-graders, Prediger and Sawyer (1986) reported on changes in several indicators of student career development since the mid-1970s. Their baseline study, conducted in 1973, confirmed that youth were seriously deficient in knowledge about the world of work and career planning and recommended that significant changes be made in the area of career guidance and placement. Their follow-up in 1983 points to a slow but steady rise in precollege career development activity:

- Since the mid-1970s, there had been an increase in the proportion of 11th-graders who reported receiving "some" or "a lot" of career planning help.

- There was also an increase in the proportion of eighth- and 11th-graders who reported "talking several times" with a counselor or teacher about career goals, interests or abilities.

- Although the total remained low, there had been an increase in the proportion of students participating in school-based career planning activities.

Analysis of the National Educational Longitudinal Survey

In 1988, the NELS collected data from eighth-graders, their schools and parents on vocational counseling services and their use, at both the student and school level. Subsequent follow-ups were scheduled to take place at two-year intervals. P/PV analyzed the base-year data (1988) and the first follow-up (1990). Data from the 1992 follow-up were not available in time for inclusion in this report.

Although the questions asked by NELS refer more to **vocational** education and **academic** guidance than to **career** education and guidance, both surveys offer useful insights into what is available and used in today's schools.

To focus on the services available to disadvantaged youth, we made two kinds of comparisons in our analyses. We contrasted schools with high concentrations of disadvantaged youth (defined as 50 percent or more eligible for free or reduced-price lunch programs) with schools that have no disadvantaged students, allowing us to examine differences in career guidance activities that might be associated with the general income level of students attending the schools. We also compared individual students from different socioeconomic status (SES) backgrounds.[14] This allowed us to examine differences in propensity to use career guidance resources between low SES and high SES students.

What Is Available to Eighth-Graders and What They Use

The vast majority of eighth-graders in the survey attended schools that offer academic and behavioral problem counseling. (See Table 2.) However, only slightly more than half (57%) attended schools that offer vocational counseling. About one-fifth of eighth-graders went to schools that have vocational education clubs.

Students in wealthier schools had the least access to **vocational** counseling: only 30 percent of the schools with no students on free/reduced-price lunch offered such access. In contrast, 58 percent of the schools with more than half of their students in lunch programs had access to vocational counseling. Likewise, in schools with more students receiving free or reduced-price lunches, students were more likely to have access to vocational education clubs.

Only around 4 percent of eighth-graders had participated in one or more vocational education clubs in some capacity, and only one-fifth had met with their guidance counselor to discuss occupational or career issues; however, a substantial majority of students (62%) had spoken with **another adult** about jobs or careers after high school. (See Table 3.) Regardless of the concentration of disadvantaged youth in school, students were much more likely to seek guidance outside of school. This pattern of guidance-seeking behavior was also evident for individual students across SES levels. (See Table 4.)

The NELS data further indicate that in all cases, youth in less affluent schools and from lower SES levels tended to seek career guidance more than students from the most affluent schools and wealthier backgrounds. (See Tables 3 and 4.)

Increased Services and Use by Tenth-Graders

On average, access to career-related guidance increased as students in the survey moved from the junior to senior high school level. Only 5.7 percent of the schools in the 10th-grade NELS follow-up had no recognizable vocational counseling program, down from 43 percent at the eighth-grade level. In 1990, 90 percent of 10th-

14. An SES index was constructed for each student using the following data from the parent questionnaire: father's and mother's educational levels; father's and mother's occupations; and family income.

Table 2

AVAILABILITY OF COUNSELING
AND VOCATIONAL CLUBS TO EIGHTH-GRADERS

Counseling and Vocational Clubs	Reported by Administrators in:		
	All Schools (100% of sample)	Schools with No Students on Lunch Program (12% of sample)	Schools with More Than Half of Students on Lunch (15% of sample)
Academic Counseling	90%	76%	90%
Behavioral Counseling	95	91	95
Vocational Counseling	57	30	58
Vocational Education Clubs	21	6	26

Source: U.S. Department of Education, NELS, 1988: Base Year.

Table 3

EIGHTH-GRADERS REPORTING
THEY TALKED ABOUT JOBS/CAREERS

Talked With:	Reported by Eighth-Graders in:		
	All Schools (100% of Sample)	Schools with No Students on Lunch Program (12% of sample)	Schools with More Than Half of Students on Lunch (15% of sample)
Counselor	20%	13%	25%
Teacher	23	19	32
Other Adult	62	58	68

Source: U.S. Department of Education, NELS, 1988: Base Year.

Table 4

EIGHTH-GRADERS REPORTING
THEY TALKED ABOUT JOBS/CAREERS
BY SOCIOECONOMIC STATUS

Talked With:	Socioeconomic Status Quartile			
	Highest (1)	(2)	(3)	Lowest (4)
Counselor	16%	19%	21%	25%
Teacher	20	23	24	28
Other Adult	56	63	62	65

Source: U.S. Department of Education, NELS, 1988: Base Year.

grade students attended schools that had a career information center, the only component consistent with our definition of career guidance.[15] (See Table 5.) This represents a significant increase over the 30 percent availability reported by Chapman and Katz in 1981.

Overall, students in the schools with the highest concentration of disadvantaged students had more access to each resource category. That poor schools appear so resource-rich may appear paradoxical, but with the exception of "Career Information Centers," the identified resources are specifically vocational. This may be indicative of the tendency reported in the educational literature to steer at-risk youth away from academic programs and toward vocational ones.

Turning to the issue of **use** of these resources, information concerning students' conversations about jobs or careers with counselors, teachers and other adults was not available in the first follow-up. The overwhelming majority of students (83%) had not taken **any** coursework in career education. School administrators estimated that 69 percent of students used the career information center, a significant increase over the 16 percent reported eight years earlier by ETS. However, while students in the schools with the highest concentration of disadvantaged youth had the greatest access to career information centers, the NELS data indicate that these students made slightly less use of the centers than did students in schools with the lowest concentrations of at-risk youth. (See Table 6.)

The NELS data confirm that most counseling that takes place in schools is academic or psychological. Schools are not ensuring that their students receive the level of educational and counseling services needed to serve those headed straight to work. Low proportions of students take coursework in career education or participate in the career development activities that are available.

Quality of Services Available

According to a qualitative examination of school-based guidance conducted by the Commission on Pre-College Guidance and Counseling (1986), services available to high school students are typically "too little, too late." The Commission found, among other things, that counselors have responsibilities that extend far beyond student preparation for postgraduation placement. Provision of career information and guidance is only one small--and low-priority--aspect of their job.

In most urban schools, counselors' time is divided between two extremes: those who are in trouble and those who are assertively pursuing postsecondary school opportunities. In some urban areas, as many as 600 to 700 students are assigned a single counselor. In suburban school districts, on the other hand, attention is focused

15. Administrators in the least affluent schools displayed the highest levels of uncertainty concerning the resources at their disposal. Since only 70 percent of these administrators responded to this question, the actual percentage of schools with career information centers might range from 63 to 93 percent. Such uncertainty raises questions about the quality of direction and guidance youth in these schools receive.

Table 5

AVAILABILITY OF SCHOOL-BASED CAREER, VOCATIONAL AND OCCUPATIONAL RESOURCES

Resource	Reported by Administrators in:		
	All Schools (100% of sample)	Schools with No Students on Lunch Program (10% of sample)	Schools with More Than Half of Students on Lunch (9% of sample)
Career Information Center	90%	77%	90%
FTA/FHA/FFA[a]	89	68	90
Vocational Education Clubs	60	24	56
Occupational Training Center	39	24	59

Source: U.S. Department of Education, NELS, 1990: First Follow-Up.

[a]Future Teachers of America, Future Homemakers of America and Future Farmers of America

Table 6

TENTH-GRADE STUDENTS' USE OF SCHOOL-BASED CAREER/OCCUPATIONAL RESOURCES

Career/Occupational Resource	All Schools (100% of sample)	Schools with No Students on Lunch Program (10% of sample)	Schools with More Than Half of Students on Lunch (9% of sample)
REPORTED BY ADMINISTRATION			
Career Information Center	69%	63%	59%
Occupational Training Center	39	9	35
REPORTED BY STUDENTS			
Coursework in Career Education	17	13	18
FTA/FHA/FFA[a]	10	4	14

Source: U.S. Department of Education, NELS, 1990: First Follow-Up.

[a]Future Teachers of America, Future Homemakers of America and Future Farmers of America.

almost exclusively on helping students prepare for college. Career guidance or assistance in the transition to work receives short shrift. In some rural districts, no counselor is assigned to the school or a counselor travels around a region.

Such findings have led researchers from ETS (Chapman and Katz 1983) and elsewhere to a harsh conclusion--that a coherent curriculum for career decision-making does not exist in the public schools. Students lack a mechanism for relating objective facts to themselves as decision-makers. In practice, the ETS authors conclude, there has been a failure to recognize the difference between instruction and guidance. While both aim to provide knowledge, develop understanding and build competencies, guidance requires that a substantial portion of the knowledge come from the learner. The learner is part of the content. His or her values, aptitudes and resources influence the selection and viability of occupational goals. What has been lacking is an explicit decision-making strategy that helps young people interpret and use career-related information. There is widespread agreement that school-based counseling programs neglect the non-college bound, ignore the critical nature of the school-to-work transition phase and lack services to meet the special needs of disadvantaged youth.

Career Guidance In Employment And Training Programs

This section examines the range of career guidance services in the contemporary employment and training system. Perhaps not surprisingly, career guidance services offered through JTPA-funded programs are often delivered in school settings.

In 1990, Berkeley Planning Associates (BPA), in conjunction with P/PV (BPA, forthcoming), undertook to describe the range and variation of programs serving youth under JTPA. Eighty-nine programs in 25 SDAs were reviewed. About one-third of them were found to treat youth the same as adult clients. Only 40 percent of the SDAs sampled had "comprehensive and coherent" strategies for serving both in-school and out-of-school youth.

It was found that SDAs with distinct youth policies (16 of the 25) tended to be driven by Youth Employment Competencies (YECs)[16] rather than performance standards. Two of the four major YECs--Preemployment (PE) and Work Maturity (WM)--parallel those found in the educational and occupational exploration component of career guidance. (See Table 9 on page 38.)

16. These are Preemployment Skills, Work Maturity, Basic Education and Job-Specific Skills.

The BPA report described curricula for the JTPA competencies as sometimes boring to youth and ineffective, and little evidence indicated that the SDAs sampled offered any further career awareness or guidance activities, or support services. **Both ends of the career guidance spectrum, self-knowledge and planning, were neglected.**

Overall, a third of the programs indicated that placement, not competency attainment, was their primary goal, even for in-school participants. Many of the providers claimed this goal was imposed on them by the SDAs and disagreed with the emphasis on getting jobs for this population. Although federal guidelines recognize placement is not the only outcome, a significant number of SDAs continue to require it.

Remarkably little evidence of career guidance beyond the two competencies could be found. **Of the 37 in-school providers offering one or more YECs, only two combined instruction with a definable career awareness/exploration component.**

In the case of the 51 out-of-school providers surveyed, the information concerning career guidance is even sketchier. The most common types of activity were occupational skills training and preemployment/work maturity competency training, though not all providers tested for these competencies. The quality of the training was generally characterized as good, as was the match between training curricula and participants. Yet, in some SDAs, the choices of training programs were severely limited. For example, only six providers offered tryout employment. A small number of providers did offer life-skills training as a separate training service, but it is unclear to what degree career planning was addressed in these programs. No providers identified career guidance as a specific goal or programmatic theme.

The BPA study provides little reason to believe that fully formed career guidance programs are in operation under JTPA. In an effort to cross-check these data, we spoke with administrators in 20 SDAs in 10 states that are part of our STEP network and account for over 50 percent of JTPA expenditures. Because we focused attention on career guidance in our conversations with SDA officials, initial responses to our queries suggested that "career guidance" pervaded youth programs.

However, there is reason to doubt the accuracy of these responses in regard to what is classified as career guidance. The range of programs offered by SDA officials as examples of career guidance was broad enough to include virtually every type of service provided by the SDAs, from tryout employment to occupational skills training. Indeed, due to diffuse definitions concerning what qualifies as career guidance, a common response was "all our programs offer career guidance."

A small number of officials were more tempered in their responses. They stated that while programs were intended to deliver career guidance, their SDA was unable to offer the amount and kind of career guidance actually needed by their clients. The following response seems to accurately describe the circumstances that pertain to SDAs generally:

We do all we can. We have a strong partnership with education, but we can't do much career guidance. We believe the "front line" in career guidance is the education system. JTPA has to serve a whole spectrum of people. We have a small staff here. There are always competing demands for resources, but only a fixed resource base.

After further probing, patterns similar to those described in the BPA report were discovered. For the most part, programs characterized as having "strong" career guidance components focused on in-school youth. Typically cited were the local version of Jobs for America's Graduates or various school-to-work programs. A small number of programs for out-of-school youth contained elements of occupational exploration and self-assessment. These activities were often described as occurring "parallel to" or "in addition to" job training. Out-of-school programs tended to be described as "work-focused" or "workplace-oriented." None could be characterized as providing comprehensive career guidance.

Difficulties exist in trying to formulate an accurate picture of what is actually taking place in the JTPA system with respect to career guidance: the evidence is fragmentary, the range of definitions applied by respondents is wide and a gap between policy and practice is likely to exist. Neither of the two efforts reported here claims to measure the true extent and nature of career guidance in the JTPA system, but they do support inferences that lead to the following conclusions:

1. JTPA and SDA officials believe that career guidance is an important service to offer JTPA participants.

2. Virtually all SDA officials we contacted believe the JTPA system offers career guidance to its participants.

3. Certain features of career guidance do appear in services provided through JTPA-funded programs.

4. These services rarely, if ever, correspond with the comprehensive model of career guidance.

Evaluation And Evidence Of Effectiveness

The weaknesses of the existing evaluation research literature are well-documented (e.g., Splete and Miller, 1981; Tittle, 1982; Campbell et al., 1983). A small set of observations characterizes the entire field:

- Rigorously conducted experimental evaluations are extremely rare.

- Studies have rarely compared the outcomes of one program with those of either a control group or other counseling programs, thus have yielded information on program effectiveness but not the relative effectiveness of different approaches.

- Evidence regarding the impact of **specific** career guidance interventions on individual students is either inconclusive or incomplete.

- Remarkable diversity and creativity have been used in measuring the effects of career guidance programs.[17]

- Despite variation in measurement, the cumulative data indicate that participation in career guidance programs appears to produce beneficial outcomes.[18]

Solid **national-level** data on program effectiveness are difficult to accumulate. The best example is offered by Hotchkiss and Vetter (1987), who used High School and Beyond data to test the effects of career guidance and counseling on employment and education outcomes. Schools were distinguished by the differential emphasis of their career guidance program on counseling versus occupational information. When coded in this manner, the authors found that youth in the schools characterized as "counseling intensive" tended to have higher career goals and higher levels of college enrollment than those in the occupational information group. On the other hand, youth attending schools that emphasized "occupational information" had lower growth on achievement test scores. Thus, students in schools that conformed to the current definition of career guidance, which is based on counseling, experienced better outcomes than students in schools emphasizing the obsolete, information-based version.[19]

A stream of small-scale evaluation research projects took place in the late 1970s in an effort to assess the flourishing career education movement. By the early 1980s, a number of widely disseminated reviews had confirmed the general utility of career guidance. Spokane and Oliver (1983), who limited their review to 52 studies that made treatment and nontreatment comparisons, provide a powerful example. Their investigation confirmed the general finding that most interventions had "some beneficial effects" that ease the transition to work or further education. Yet their finding that the "outcome status" of the average client receiving "any type" of vocational intervention exceeded that of 80 percent of the controls highlights the fact that few differences in effectiveness are found among the diverse treatments. In line with

---

17. The following are just some of the dependent variables that were used in the studies we examined for this report: job interview skills; exploratory behaviors; decision-making difficulty; problem-solving ability; perceptions of occupations; satisfaction in occupational choice; anxiety level; mature coping strategies; and number of alternatives considered. Many others have been proposed.

18. See, for example, Mangum, 1991; Bloch, 1989; Crites, 1987; Prediger and Sawyer, 1986; Campbell et al., 1983; Spokane and Oliver, 1983; Bucknam and Brand, 1983; Pinson et al., 1981; Herr, 1979; and Miller, 1991.

19. Significantly, Hotchkiss and Vetter (1987:57) were compelled to comment on a pattern of effects involving **nonguidance** variables. The fact that status, background, race and gender influence career outcomes, they contend, is a salient finding for guidance providers. They propose that "one of the goals of guidance might well be to reduce the influence of background on career outcomes."

earlier criticisms, they insist that more analytical work needs to be done to improve our understanding of treatment effects.

Pinson et al. (1981) present two particularly relevant findings in their review. Their analysis focused on what they termed "depressed communities"--areas with high unemployment, little or no new industry and large proportions of poor residents. They cite evidence that guidance and counseling programs in these areas were particularly effective. They found that when career guidance accompanied the delivery of other services for at-risk youth, recidivism rates were lowered, school attendance increased, educational and career goals were more firmly articulated and pursued and placement rates increased.

The authors go on to say that when these programs used specific approaches that include peer counseling, employer and parental involvement and career-oriented instruction, they produced consistently high levels of success. Enhanced outcomes for at-risk youth were also increased when guidance programs were integrated with vocational skills programs. Graduates of these programs were more likely to hold onto their jobs, obtain work quickly, transfer job skills and objectives across career fields and remain attractive to their employers.

In one of the most extensive reviews, Campbell et al. (1983) examined more than 200 studies of interventions intended to enhance career development. However, in contrast to Spokane and Oliver's limited sample, these authors note that most studies they included did not qualify as "rigorous experimental investigations."

The studies were categorized according to one of five major outcome dimensions the programs sought to effect. The researchers then tallied the number in each category that reported positive results. The proportion of studies reporting positive results is overwhelming, but the ability to report at least some level of perceived improvement is likely a function of the numerous ways in which outcomes have been measured.

Campbell et al. summarized their conclusions as follows:

- The preponderance of evidence suggests that career guidance interventions achieve their intended objectives if guidance personnel are given the opportunity to provide structured guidance interventions in a systematic, developmental sequence.

- Career guidance has been successful in assisting individuals from a wide range of populations and in diverse settings.

- The number and variety of career interventions has greatly increased, giving practitioners a larger pool of treatments from which to draw.

In sum, research on the effectiveness of specific career guidance and counseling programs has generally indicated positive, encouraging results. To verify these results,

P/PV conducted a review of evaluation studies published within the past 10 years. Culled from an ERIC document search, a sample of nine evaluation studies was closely examined. A summary of the nine studies appears in Table 7.

Virtually all the evaluation studies we reviewed showed evidence of program effectiveness. In contrast to the bulk of evaluative research that limits outcome measures to short-term cognitive and attitudinal gains, all but one of the studies in our sample collected data on **observable** behaviors, such as employment, school attendance and seeking career information. These studies reported positive correlations between career interventions and these performance outcomes.

Further analysis of this small sample of studies resulted in general conclusions that are consistent with those found by analysts synthesizing a much larger sample of evaluation studies. In sum:

- The available data on these programs incorporating elements of career guidance show generally positive outcomes.
- Although three studies report comparative data on nontreatment groups, no studies in the sample used a rigorous, experimental design of random assignment to treatment and nontreatment groups.[20]
- Putting aside the treatment-only studies to look strictly at those studies that provide **comparative** data, the overall pattern remains consistently positive.
- It is very difficult to define in a succinct manner what "positive outcomes" refer to because the diversity of measures confounds the findings.

While the overall pattern of positive outcomes is consistent, the methodological inadequacies cannot be ignored. We simply cannot rely on these studies, either individually or in aggregate, to provide us with definitive conclusions. The positive findings, however, indicate that a large-scale controlled evaluation is warranted.

20. The study on Computer-Aided Career Guidance randomly assigned students to two treatment groups.

Table 7

EVALUATION STUDIES OF PROGRAMS INCORPORATING ELEMENTS OF CAREER GUIDANCE

PROGRAM/ LOCATION	TARGET POPULATION	DURATION	DESCRIPTION/METHODOLOGY	OUTCOMES
Project ARJO Sandy Union School District, Oregon	Potential and actual school dropouts aged 15 to 21	Open-ended	A follow-up study was conducted of program clients to ascertain current educational and employment status.	87% of clients obtained successful employment, exceeding project goal of 60%. Dropout rate was reduced from 8.5% to 5.4%.
Project Hi-Class New York City Board of Education	Disadvantaged, ESL urban immigrants grades 9 to 12	Throughout four-year academic program	Academic and behavioral outcomes were compared to comparable data collected on mainstream students.	Hi-Class students showed gains in ESL and academic content areas. Attendance improved and dropout rate declined. No evidence for meeting occupational needs.
Youth Awareness Program Washington, D.C. Public Schools	At-risk inner-city youth aged 12 to 19	45-minute classes meeting twice/week for one semester	Pre- and posttests conducted on attitude toward and knowledge of sex, crime and careers; behavior profiles and evaluation forms were completed by instructors.	YAP students made positive gains in both knowledge and attitudes. Attitude gains higher for younger students (12 to14). Knowledge gains higher for females.
Project Open Horizons Niagara Falls and Buffalo, NY	At-risk, urban minority youth aged 13 to 19, 80% black	Four 2.5-hour sessions	Pre- and posttests conducted using the Career Information Seeking Behavior Checklist. Self-report evaluation tapped participant impressions of experience.	More career information-seeking took place in one month after the program than during the six months prior; 95% were "very pleased"
Army Services Vocational Aptitude Battery School districts throughout Florida	1,105 10th- to 12th-graders from 10 high schools in seven districts	Approximately six months between pre- and posttests	Pre- and posttest measures of career awareness and development using Career Exploration Inventory.	Study designed to determine accuracy with which students estimate their abilities. Self-estimations were only slightly more realistic after taking the ASVAB.
Partnerships for Learning Academies in Oregon, California, and Pennsylvania	46 academies in three states serving at-risk students with career developmental curricula	Three academic years	Report synthesizes array of evaluative data on a core set of academies. Controls implied in several of the studies cited.	Academy students show greater improvement than comparison groups in daily average attendance; GPA; number of credits earned; graduation rates; employability. Grads report positive attitudinal outcomes and development of long-range career plans.
The High School Development Center Detroit Public Schools	Ninth-grade minority males, average age 16, with average of two grade retentions	Alternative education setting for one academic year	Dropout rate, attendance, attitudes and academic performance compared with a matched control group in traditional education setting.	Program students performed better during program year but, on return to mainstream, dropped to lower levels of performance in comparison to controls. Attitudes toward school and work did not improve, though students favorably evaluated the program.
VIEW Montgomery County Public Schools, MD	Special Education Students aged 14 to 19	Four-week-long summer program	Supervisors developed a pretest to ascertain students' level of self-awareness in relation to job clusters.	Improved basic skills; self-awareness in relation to vocational areas; improved understanding of career planning and decision-making skills.
Computer-Aided Career Guidance College of Education Texas A&M	College freshmen approximate age 19 with "high" SES	Structured Group (4.5 hrs/2 mos) Casual Use Group (1.7 hrs/2 mos)	Random assignment of freshmen to classes using two forms of computer-aided career guidance settings. Pre- and posttests assessed several aspects of career development.	Students in structured setting scored significantly higher on all instruments indicating gains in career development. Mere exposure produced only limited gains.

Career Guidance Program Site Visits

In an effort to identify potential exemplary programs, P/PV conducted a broad search of computerized bibliographic data bases for all materials related to career guidance for disadvantaged youth, with a particular focus on reports containing evaluative information. We also obtained and reviewed summaries of all programs identified by the Department of Education's National Diffusion Network. Additional programs were identified through reconnaissance by P/PV and recommendations from experts in the field. The criteria used to select programs for potential review were that the program: (1) offer at least one identifiable element of career guidance; (2) target disadvantaged youth; (3) could provide evidence of program effectiveness; (4) have been recognized by another agency as exemplary.

Thirty-six program descriptions obtained through the search were reviewed and coded according to the four criteria. Based on the available documentation, eight of the 36 programs met three or more of the criteria. Telephone interviews provided the additional information needed to narrow the list further. The programs we found were typically located in low-poverty, suburban, secondary educational settings. The vast majority of programs worked with students in either a school-within-a-school program, an alternative school or a traditional school setting. Four programs that best met our selection criteria were visited; these were Maryland Tomorrow/Project Success; DeLaSalle; City-As-School; and PRO-100. A summary of these programs appears in Table 8.

Each of these programs has demonstrated success with its target populations. In general, dropout rates declined, while attendance, motivation, life skills and future planning increased. The scant data on longer-term outcomes suggest that the benefits may persist. Each program boasts powerful and unique qualities that account for its effectiveness. To varying degrees, the four programs share the following traits:

1. **Career guidance is not compartmentalized and targets youth in ninth grade or earlier.** Exemplary programs utilize an integrated sequence of career development activities (self-exploration, information gathering, hands-on experience and decision-making components) rather than one-shot approaches occurring late in the school career (i.e., late adolescence). Career guidance competencies are developed as part of the educational experience. They are "built in" rather than "added on." PRO-100 coaches claim that equal amounts of career guidance take place during the work **and** curricular components of the program. More important, the activities are tailored to the age and stage of participants.

2. **The connection between education and employment is emphasized.** All programs visited seek to help students understand the relationships between their current status, their planned occupational futures and their educational needs. They link education, knowledge and skills to economic, personal and social rewards.

Table 8

SUMMARY OF CAREER GUIDANCE PROGRAMS VISITED AS PART OF THIS STUDY

PROJECT	CLIENTELE	DESCRIPTION
Maryland Tomorrow/Project Success Prince Georges County, MD Located in six P.G. County schools School-Within-A-School Model	Academically disadvantaged at-risk ninth-graders Program Year 1991-92 90 students served per school 85% black <10% economically disadvantaged	Beginning in the summer before ninth grade, selected students participate in a year-long program that includes counseling, education, vocational labs and social skills training. Each cohort is taught within a team structure and receives intensive attention from teaching and counseling staff. Curriculum includes class units on careers and vocations. Weekend retreats focus on employment and social skills. Counseling caseload is limited to 90 and shared by a team of two. Professional staff are supplemented by a corps of mentors who volunteer to meet with kids on school site. Follow-up activities allow teacher-teams to stay involved with "their" students through graduation.
DeLaSalle Education Center Kansas City, MO Replicated at over 45 sites nationwide including a satellite program located in predominantly Hispanic neighborhood across town. Alternative School Program	Academically disadvantaged at-risk, inner-city school dropouts Program Year 1991-92 660 enrolled 83% between 14 and 18 years old 90% economically disadvantaged 95% academically disadvantaged 83% black	DeLaSalle, an accredited alternative school, is distinguished by its adherence to a student-centered approach that includes a comprehensive array of support services and individualized case management. Personal, family, substance abuse, and vocational counseling supplement DLS's concentration on providing at-risk youth alternative educational opportunities leading to a high school diploma or postgraduation plans. Students negotiate individualized courses of study on a contractual basis with each teacher, then pursue them at their own pace. Comprehensive assessment of student needs is conducted at intake. Students are assigned a counselor who tracks student progress for their duration at DLS. Counselor case load is limited to 60 students. Career education coursework and guidance are supplemented by hands-on vocational training and JTPA sponsored preemployment training.
City-As-School New York, NY Original sites located in Manhattan, Brooklyn, and the Bronx, New York, but has been replicated in over 35 sites nationwide as a school-within-a-school model or a stand-alone program. Alternative School Program	Inner-city youth at-risk of academic failure Grades 9-12 Program Year 1991-92 1,000 enrolled in NYC 90% economically disadvantaged 83% minority 38% black 40% Hispanic	C-A-S is designed to reconnect young people to school, the community, and the world of adult authority and responsibility based on the idea that "many institutions educate." Students gain academic credit through multiple structured and supervised experiential learning activities within the community, and gain career guidance and exploration through one-on-one contact with school-based counselors and adult mentors in internship-like experiences. They maximize choice and learn responsibility through the process of negotiation involved in entering the placement and fulfilling the customized curriculum known as Learning Experience Activity Packet (LEAP). Specialized small classes in combination with weekly seminar groups serve as forums for discussion of academic, social, and occupational issues. Maximum advisor caseload is 50 students.
PRO-100 Indianapolis, IN Worksites located on a dozen public golf courses and school grounds across the city Summer Work/Education Program	Out-of-school, inner-city youth age 14-18 Program Year 1991-92 100 open slots per year 87% black 73% male	A seven-week summer program involving paid work experience and career development coursework. Interns interact with eight trained coaches, who supervise work teams of 12 to 14, provide counseling, and lead structured career development exercises and activities. Work experience revolves around supervised public beautification projects. Daily coursework includes work maturity and career guidance curriculum. Returnees can stay in the program for up to four years. Interns, coaches and evaluators perceived different but overlapping gains: improvements in work habits, life skills and job search skills were identified by all groups.

In short, students learn the value of education. This is especially important for those who have either failed in or left the traditional educational system. All four of the programs visited provide opportunities for youth to gain work experience and reflect on these experiences in a guided, controlled environment.[21]

3. **A limited caseload for counselors, advisors, mentors or coaches allows for individualized attention.** Firsthand observation of these programs confirms their low adult-to-youth ratios. Delivery is individualized to ensure both the quality of program content and youth's positive relationships with adult authority figures. Given the career development needs of the participants, easy and consistent access to counselors is critical. All four programs have mechanisms that provide for continuity of relationships between youth and individual members of the counseling staff.

4. **Coalitions linking programs to businesses, parents and community agencies are fostered and developed.** Outreach to these partners helps ease the load of counseling and guidance and connects youth to the adult worlds of work, family and civic responsibility. Adults outside school settings play particularly important roles in guiding youth's career decisions. Each constituency contributes to the delivery of the program and has a stake in its success. "The need for truly collaborative working relationships...is clear," claims Ken Hoyt (1991a:p.43). "This is not something the education system can do by itself." The Maryland Tomorrow and City-As-School programs provide especially valuable lessons in the efficacy of reaching out to local businesses and CBOs.

Implications Of Career Guidance Research For JTPA Youth Programming

Given the concern for long-term educational and career development (of which employability is only one aspect), exemplary school-based career guidance programs generally result in highly structured, integrated curricula with relatively high standards, taught by trained, certified faculty and guidance personnel.

In contrast, JTPA programs are mandated to provide short-term skill training leading to immediate job placement and earnings gain. Consequently, JTPA programs tend to be shorter, more flexible, geared toward less academically proficient students, narrower in focus and staffed by trainers without the credentials or certification of typical vocational education teachers and career guidance personnel.

---

21. The significance of actual or simulated work experience has long been a topic of considerable attention. Recently, in a major study by University of Chicago/NORC (Bidwell et al., 1992:84), researchers assert that the experience of work is more salient to teen career clarity than age differences, ascribed characteristics or social influences. Likewise, the SCANS Commission (1991) contends that the most effective way to teach the new workplace basics is in the context of real-life situations that are relevant to the real world of work.

The populations served also differ: career guidance programs serve general in-school populations, which may include the disadvantaged; JTPA serves only economically disadvantaged and mostly out-of-school youth.

And there are significant differences in goals. Career guidance is evaluated in terms of a wide range of outcomes, of which employment is only one. Positive outcomes may include school retention, continuing education, improved basic skills, mastery of diverse competencies including life skills, etc. JTPA programs place more emphasis on employment-related outcomes (e.g., relationship of training to job obtained, job status and ability to meet employers' needs) but focus mainly on earnings. These differences--plus differences in funding, program eligibility, reporting requirements and "turf" issues--have historically created barriers to coordinating the two systems.

Recently, however, there have been signs of a desire within both fields to link career development and employment/training (Kinoshita, 1987). Findings from a national sample of educators produced the following recommendations to JTPA administrators (Lewis, 1987): expand their concept of training; shift focus from on-the-job training to more in-depth instruction; reduce documentation and paperwork to simplify the process of serving JTPA clients; conduct more joint planning; and keep an open mind when selecting service providers.

NOICC's Career Development Guidelines suggest opportunities to link career development and employment and training. The National Career Development Guidelines project, launched in 1986, represents a major nationwide effort to foster career development at all levels of education. The guidelines present a competency-based approach to career development that serves as a blueprint for states, schools, colleges and human service agencies to plan quality career guidance and counseling programs.

From the federal perspective, the guidelines can provide assistance in developing legislation and regulations related to career development programs. When standards that are based on the guidelines are used, legislators and administrators will gain a better sense of the accomplishments of career development programs. Such information can influence policy decisions about the use of resources (cf. NOICC, ***Career Development Awareness Guide***, n.d., p. 4).

Among career development professionals, the NOICC project has been received with guarded optimism. While it offers the tools and framework for significant reform, the project's small scale reflects a circumscribed commitment on the part of the federal government. Its $10.4 million budget is considered small in comparison with the major career education movement, which reached its peak in the late 1970s.[22]

22. The recently funded National Career Development Institute provides another example. The Institute, established to provide much needed preservice and in-service training and technical assistance to school personnel in all 50 states and U.S. territories, must accomplish its ambitious goals on a budget of $600,000.

A recent report issued by the Center on Education and Training for Employment (Splete and Stewart, 1990) recommends that the ***National Career Development Guidelines*** be widely disseminated to **all** career development providers at **all** age levels, so there is a common language and structure on which to build or improve comprehensive career guidance programs.

Of particular interest are the career development competencies specified in the ***Guidelines*** that culminate in the skills youth need to effectively engage in personal career planning. These cover the areas of self-knowledge, educational and occupational exploration and career planning. It is possible to compare the 12 NOICC competencies with the JTPA Preemployment and Work Maturity Competencies, which are designed to enhance participant employability. Table 9 compares the JTPA competencies and their corresponding skills, and the three major competencies identified by NOICC. It indicates that the bulk of JTPA competencies are concerned mainly with educational and occupational exploration. Self-knowledge and career planning receive much less attention in the JTPA competencies.

Solid research documenting the effectiveness of the model proposed by NOICC has yet to be published. A preliminary report on the lessons learned from the pilot study appears in Miller (1991). The rigorous measurement of contemporary program outcomes is necessary to determine the career development progress of students and workers, especially the disadvantaged. Yet rigorous evaluation has often been a neglected aspect of program design. Only now are the various states beginning to develop comprehensive evaluation plans.

Summary

When asked whether the available career guidance activities meet the needs of the at-risk population, Ken Hoyt, former Director of Career Education with the Department of Education, stated:

> *The general answer to this question must be a resounding NO!. . . Their total environment provides them with negative attitudes toward work, workers, and working. Until and unless we begin at the elementary school level. . . there is no way that adequate career development assistance can be made available to at-risk youth.*[23]

Disadvantaged youth, disproportionately exposed to risk factors, comprise the fastest growing segment of the work force. Virtually all observers conclude that youth-serving agencies need more resources to address the needs of this growing population. While some data indicate a rise in the proportion of students taking part in school-based career development activities overall, other data indicate that

23. Personal correspondence from September 22, 1992.

Table 9

CORRESPONDENCE BETWEEN JTPA-DEFINED PREEMPLOYMENT AND WORK MATURITY COMPETENCIES AND THOSE IDENTIFIED BY NOICC

JTPA COMPETENCIES	NOICC COMPETENCIES: *Self-Knowledge*			*Educational and Occupational Exploration*					*Career Planning*			
	Understanding Influence of Positive Self-Concept	Skills to Interact Positively with Others	Understanding the Impact of Growth and Development	Understanding the Relationships Between Education, Achievement and Career	Understanding Need for Positive Attitude Toward Work and Learning	Skills to Locate, Evaluate and Interpret Career Information	Skills to Prepare to Seek, Obtain, Maintain and Change Jobs	Understanding How Societal Needs Influence Nature/Structure of Work	Skills to Make Decisions	Understanding the Interrelationships of Life Roles	Understanding Continuous Changes in Male/Female Roles	Skills in Career Planning
Preemployment												
Awareness of World of Work				♦				♦				
Labor Market Knowledge						♦		♦				
Occupational Information						♦		♦				
Career Planning and Decision Making				♦			♦		♦			♦
Job Search Techniques						♦	♦					
Work Maturity												
Punctuality					♦		♦					
Regular Attendance					♦		♦					
Neat Appearance		♦			♦		♦					
Good Working Relationships		♦			♦		♦					
Following Instructions					♦		♦					
Showing Initiative and Reliability		♦			♦		♦					

resources both in and outside the school system are stretched far beyond their ability to meet the needs of all students. Many fear that those most in need of high-quality career services may be those least likely to receive them.

Most of what is defined as career guidance occurs in the school system. However, current school-based counseling programs are geared primarily toward those planning to attend college. Career planning and job placement are low priorities for most school-based counselors.

Attempts to determine the level of career guidance activity in the employment/training system disclosed little beyond superficial provision of basic occupational information and specific job training. Although a guidance component is often built into a larger vocational or occupational program, the services tend to be unsystematic, unstandardized add-ons.

Research on the effectiveness of career guidance, has indicated consistently positive results. Exemplary programs seek to integrate the diffuse elements of career guidance into a coherent and comprehensive package. The strategies employed support the conclusion of the National Center for Research in Vocational Education (NCRVE) (cited in ***Employment and Training Reporter*** (ETR), August 19, 1992:974), that career guidance may require significant redefinition:

> *Instead of an ancillary department or series of fragmented and event-oriented activities (e.g., career day), the guidance program is restructured into an organized sequence of activities designed to help students learn how to plan and develop their careers.*

But a critical look at the data on existing program content and structure confirms that what is now available is not comprehensive career guidance. Instead, one finds only isolated and fragmented services and activities. Thus, while counselors and mentors, information resources and career centers, training programs and vocational clubs provide youth with the ingredients of career guidance, the national picture lacks any sense of coherence. The recent thrust, and current challenge, is to combine these elements into a coherent system that meets the needs of all youth. Thus, while it is possible to document growing services and activities, they do not represent a comprehensive guidance program.

Moreover, the existing services tend to go underutilized. Significant numbers of youth with access to multiple forms of career guidance appear not to take full advantage of them. They turn instead to resources outside the school--namely, parents, peers and firsthand experience. This may reflect the general lack of priority for career guidance within the nation's schools. Students are left to decide on their own what resources to access and when. More profoundly, they may not be provided with any reason to seek career information, and indeed, may even be discouraged when trying.

IV. Findings, Opportunities And Recommendations

As a national priority, career guidance in education and training has risen and fallen in relative terms rather than appearing and disappearing altogether. Federal policy has encouraged the expansion of career guidance but has failed to provide adequate support for comprehensive implementation. As a result, schools have remained the locus of guidance activities. Even within school guidance departments, however, job counseling, career guidance and postgraduation planning for work-bound youth remain low priorities.

In contrast to the U.S., most developed countries have highly structured institutional arrangements to help young people make the transition from education to employment. Observers point to European examples of the apprenticeship system or the Japanese school system's practice of aggressively referring students to employers as prime examples of integrated systems. In other countries, there is either a strong employment counseling and job placement function within the school system or a labor market authority working in cooperation with the schools (Barton, 1990:22). In the U.S., however, such practices occur in only a small number of innovative schools.

Somehow, most high school graduates muddle through. About half enter college, though only half complete a four-year degree. A large proportion of the "forgotten half" who do not enroll in college encounter obstacles to careers in the primary labor market. And some 20 to 30 percent of our student body will leave the school system before graduation--unmotivated, unskilled and unprepared. These are the youth who often slip through the rather large holes in the school-to-work transition "system"--a loosely knit safety net designed not to catch everyone, but rather to provide a series of handholds for the agile and fortunate few who are able to catch on.

This report concludes that disadvantaged youth need an effective, integrated system of career guidance that offers a wide range of services and activities designed to help them manage their personal career development process. In addition to offering a strong academic base, monitored work experience and job-readiness training, a comprehensive system must incorporate a well-articulated, multiyear sequence of career guidance activities (de Lone, 1992).

Findings

Definitions and Structure

- In practice, there is considerable confusion about what constitutes career guidance. School-based guidance counseling is often narrowly defined as helping high school students make decisions about college. Career counseling outside the school system, meanwhile, has been broadly defined as anything leading to preemployment training.

- Within the field of career development, there is a growing consensus as to what career guidance should be: a comprehensive system of sequential activities available to youth and adults throughout their life span.

- A comprehensive career guidance program consists of three essential components:

  1. Self-knowledge and self-awareness, achieved through guided examination of personal values, interests and goals;

  2. Educational and occupational exploration, achieved through the presentation and integration of high-quality information and direct experience; and

  3. Decision-making and career planning, achieved through active guidance that leads to understanding the interrelationships between the self and the world, and the development of skills to make realistic choices and rational decisions.

- The NOICC career development guidelines offer a common language and a set of useful tools that can assist in developing legislation and regulations related to career development programs. The guidelines represent professional consensus in three main areas: Student/Adult Competencies and Indicators; Organizational Capabilities; and Personnel Requirements.

Need

- Experts agree that young people need opportunities to grow in self-knowledge, explore career options and develop decision-making and career planning skills. Youth also need access to work-related experiences that stimulate career decisions. Specific job training and placement alone can serve only short-term goals and may not meet the needs of developing adolescents.

- The competencies that career guidance programs seek to instill apply to all youth, though the needs of the at-risk are particularly acute. The theoretical literature suggests that comprehensive career guidance programs may provide benefits of special importance to the development of at-risk youth, addressing areas of self-concept, knowledge and interpersonal relations.

- Many work-bound at-risk youth are in critical need of immediate and realistic career plans. A key problem disadvantaged youth face is the lack of informal information sources and networks that other young people can access to help guide decisions about jobs and careers. Without sound information sources in their families and neighborhoods, disadvantaged youth may turn to unrealistic and misleading sources.

Effectiveness

- The effects of career guidance are rarely documented carefully. Methodological shortcomings and confounding effect measures limit our ability to draw conclusions concerning the relative effectiveness of specific interventions. Better research is required.

- However, the cumulative research points to positive benefits of career guidance and counseling programs. Over two decades of evaluation, career interventions have consistently been shown to produce positive gains.

Availability

- Conclusions concerning availability and use of career guidance services must be qualified. First, survey indicators are limited. They capture vocational and occupational resources better than career guidance, at least as defined in this report. Second, responses to questions concerning career guidance services from administrators in disadvantaged schools are based on only 70 percent of the sample, as opposed to 87 percent for the most affluent schools.

- Whether the focus is on the educational system or the JTPA system, comprehensive career guidance is rarely found.

- Most programs that contain elements of career guidance are found in school systems. But schools are effectively segregated from adult life and the world of work, and students often fail to see the relationship between their school experience (academic achievement) and some identifiable next step beyond school (employment).

- NELS data indicate that students in schools with the highest concentrations of disadvantaged youth tend to have greater access to vocational, occupational and career services than do students in schools with the lowest concentrations.

- Career guidance activity is concentrated in the high school years, in contrast to established theory calling for early intervention. For many students, school counseling is "too little, too late."

- In too many schools, the guidance and counseling program consists of a set of loosely related services performed by overburdened counselors.

- The elements of career guidance found in JTPA are usually limited and seldom constitute true career guidance. Providers believe they offer career guidance ser-

vices, but for the most part, they are referring to activities that promote informational and technical knowledge rather than transformational behaviors and understandings.

Use

- In general, the limited school-based career guidance services currently available are not reaching youth. Data collected by ETS and NELS indicate that significant numbers of youth have never taken a course in career education, sought career information, attended a career day or spoken with a counselor about future career options. Given the qualifications mentioned above, the data from NELS is consistent with earlier studies that indicate that youth from lower socioeconomic levels regularly seek career development services.

- At the same time, most students claim their school's resources are insufficient, and large numbers report speaking to an adult outside the formal career guidance system about occupations and careers.

Taken together, these findings suggest five fundamental principles that can guide the design and delivery of career guidance. To maximize potential effectiveness, career guidance services should be:

- **Comprehensive**. Addressing the full range of career development needs faced by adolescents rather than isolated deficiencies (i.e, lack of information or lack of skills), with special recognition of the acute needs of the disadvantaged;

- **Developmental**. Offering activities and experiences that are age- and stage-appropriate, beginning early and geared specifically toward the unique needs of youth rather than adults;

- **Competency-Based**. Prioritizing guidance services toward self-concept, values, attitudes, new understandings and general work habits rather than specific occupational information and technical skills;

- **Integrated**. Tightening the link between education and work, both conceptually and in actual practice, making the dynamic interrelationship between the two explicit; and

- **Experiential**. Integrating monitored preemployment work experiences that simulate the real workplace environment, making the transition to full-time work less abrupt.

Opportunities To Expand Career Guidance Through JTPA

The new JTPA amendments represent both challenges and opportunities to enhance the extent and quality of career guidance in JTPA's employment and training programs for youth. In general, the new amendments increase opportunities to work with youth for longer periods of time, in school settings and with greater flexibility in measuring positive outcomes. Given the importance of coordinating career guidance efforts with the education system, it is worth while to note that the proportion of funds set aside for education coordination in JTPA was not changed in the new legislation, remaining at 8 percent.

1. The new amendments require that at least 65 percent of both youth and adult clients face barriers to employment over and above economic disadvantagement--thus increasing the proportion who are among the hardest to serve. Research suggests that effective programs offered to these groups will require more intensive and extensive counseling and guidance services. Traditional training strategies could ignore the many educational, social and developmental handicaps these youth face.

2. Newly expanded services are designed to help Private Industry Councils (PICs) provide assistance to youth who need services beyond job training to be employable. For example, DOL may award up to 25 competitive grants per year to communities with high poverty rates. In-school programs may be established in high schools in which at least 30 percent of the students come from low-income families. These funds provide valuable opportunities for the Department of Education to continue partnerships with DOL.

3. The new law requires SDAs and service providers to objectively assess program participants to determine their needs. This new requirement represents an important opportunity to increase clients' self-assessment and begin the essential but neglected process leading to higher levels of self-knowledge and self-awareness.

4. New performance standards emphasize the actual acquisition of skills rather than job placements, and include dropout prevention and enrollment in apprenticeships, as well as attainment of employment competencies.

In general, the amendments seem to provide greater opportunities to increase the delivery of career guidance services through JTPA. However, providing **comprehensive** career guidance for out-of-school youth will remain problematic, given the difficulties associated with working with youth in a sustained manner once they leave school. Beyond schools, work-based experience, job training and placement represent the most fully articulated employment services currently available. These interventions tend to work well with adults, but presuppose proper development in

the areas of self-concept, work maturity and career planning. Most activity in JTPA is concentrated on occupational exploration and job information. (See Table 9.)

Self-awareness and career planning represent areas of career development intervention that require the greatest amount of enrichment. However desirable, it is probably not feasible to expect fully articulated versions of career guidance to be implemented throughout the JTPA system. In addition, due to limitations in the research literature, it is difficult to say what a useful subset of services might be, or whether an idealized system will work effectively with all populations. However, some combination of career information and decision-making skills appears to be essential for succesful youth outcomes. Our findings suggest that DOL employment and training programs aimed at youth would be well-advised to expand service repertoire in these directions, thus providing more attention to the adolescent career development process.

Recommendations

The following recommendations suggest ways in which DOL can enhance and integrate current programs to cover neglected areas of career development through expanded career guidance activities:

1. **Encourage and support joint ventures between the Departments of Labor and Education.** The comprehensive and sustained nature of fully formed career guidance requires partnerships between major federal departments. Education and Labor must jointly determine what needs to be done, while recognizing that any effort to address youth at an early age must begin at the school level.

   Schools are an obvious place to reach youth; however, the education system lacks many of the needed resources and expertise to deliver comprehensive services. School counseling has for the most part concentrated its resources on the college-bound. Labor, with connections to the world of work, can provide expertise on career opportunities, labor market trends, job training and work experience. In addition, few institutions beyond JTPA, including schools, can reach youth during the summer and other gap periods in students' lives.

   If JTPA is to be used to promote career guidance, DOL must pursue increased collaboration with the school system. The 8 percent set-aside provisions in JTPA could serve as a useful tool in promoting such collaboration around a concrete service area. Collaboration also would address the frequent criticism leveled at JTPA that its programs are not connected to a mainstream system.

   Bridges with education could be strengthened by focusing JTPA resources on career guidance as the in-school service of choice. JTPA, in collaboration with the Department of Education, could further define the objectives and structure of in-

school career guidance programs, to ensure compliance with standardized and comprehensive models.

The 1990 amendments to the Carl Perkins Act require the National Association of Vocational Education (NAVE) to describe and evaluate the Act's level of coordination with the Adult Education Act, the National Apprenticeship Act, the Rehabilitation Act of 1973, the Wagner-Peyser Act and JTPA (Grubb, 1992). DOL could require comparable assessments of cooperation with the Department of Education from the perspective of JTPA, the Job Service, apprenticeships and work-based learning programs. Joint programs that intervene earlier may reach more youth while at the same time reducing the ranks of the hardest-to-serve population of the future.

2. **Explore the feasibility of developing career guidance projects for out-of-school youth.** The current findings indicate that the employment and training programs available through JTPA for youth are essentially straight training and placement services. Little, if any, career guidance beyond the basic preemployment/work maturity competencies is offered through these programs.

   Given the potential of career guidance to help meet the needs of disadvantaged youth and the lack of success of currently configured employment/training programs, there appears to be a definite need for more exploration into the ways career guidance can be offered to those youth who have abandoned the school system. DOL should consider piloting an extensive integrated program for out-of-school youth that has career guidance as its centerpiece and combines other services that appear to offer significant benefits to disadvantaged youth (e.g., monitored work experiences). Such a pilot would be conceived as a sustained venture, exploiting the new opportunities through JTPA to work with youth over longer periods of time.

   While its central focus would remain on individual career planning, the pilot would offer monitored work experience and supplemental training that build on a platform of enriched guidance services. Such a program might provide the necessary tools for disadvantaged youth to make clear and intelligent decisions, while offering pathways for them to become self-directed, responsible adults.

3. **Incorporate into career guidance services as many elements of the comprehensive model as possible**. For programs offered in both school- or non-school-based settings, these elements include:

   a) ***Stimulation of Developmental Growth*** — To produce the strongest effect, career guidance must stimulate developmental growth rather than treat chronic deficiencies. But at present, the majority of SDAs do not have comprehensive and

coherent strategies for serving youth; in fact, a large proportion view and treat youth and adult clients the same way.

Career development takes place within the broader context of adolescent development and therefore should not ignore youth's human needs. Comprehensive career guidance programs recognize this by guiding youth through a sequence of stage-appropriate activities linked to a series of ever more sophisticated competencies that combine to form the skills youth need to prepare for and succeed in the world of work. Given the acute needs of disadvantaged youth, these career interventions should be bundled with additional support services.

b) ***Integrated Strategies and Interventions*** — Single strategies cannot be expected to address the diverse array of needs across the disadvantaged population. Nor can short-term, unintegrated, one-shot experiences meet the profound multiple needs of individual youth. Therefore, comprehensive programs integrate multipronged, multidimensional career interventions into fully formed programs (e.g., self-assessment, one-on-one counseling, group counseling, computer-assisted exploration, curricular integration, hands-on experiences, apprenticeships, etc.) with emphasis on career guidance, counseling and planning.

Recommendations for action in schools have called for models in which counseling is **central** rather than **peripheral** to teaching and learning. Such recommendations call for earlier and more consistent access to counselors, especially at periods of academic transition. Employment and training programs should adopt a similar orientation, integrating career guidance and career planning into the instructional curricula of their programs with a focus on the transition to work.

c) ***Experiential Learning Opportunities*** — DOL should consider and develop mechanisms to coordinate and strengthen youth's **naturally** occurring work experiences. Experiential strategies appear especially productive in engaging those who have abandoned the traditional school setting. The vast majority of American youth will work for pay by the time they graduate from high school, though minority disadvantaged youth are significantly less likely to work during their teen years. Currently, 5.5 million teenagers hold part- and full-time jobs, but these tend not to be monitored or integrated into their educational experience and may expose them to poor working models.

Work experiences can serve as a catalyst to career development **if** the youth participate in quality experiences. DOL should provide structured opportunities for adolescents that capitalize on their enthusiasm about work. Two recent and popular initiatives founded on the principle of integrating the arenas of work and education include work-based learning and apprenticeships. Monitored apprenticeships may help instill a sense of satisfaction in work that will carry throughout their lives. DOL should explore mechanisms to internally coordinate work-based learning and apprenticeships with career guidance.

At the same time, work-based learning activities provide valuable opportunities to engage the interest and resources of the private sector. More important, strategic use of the secondary labor market as a "learning laboratory" may help transform "dead-end" jobs into "stepping stones" to future career opportunities. Local PICs within the JTPA system are particularly well-positioned to serve a coordinating role in this regard.

d) ***Use of Multiple Mediums to Present Information*** — Accessible and accurate information about jobs and careers remains an essential building block of career guidance. Currently, the sources of career planning information for youth reside predominantly in textual form. However, a new study by ETS (Kirsch et al., 1992) found that 35 to 45 percent of high school graduates participating in JTPA, the Job Service and Unemployment Insurance have literacy skills in the lowest two of five levels. Sixty-five to 70 percent with more than eight years of education but no high school diploma fell into those categories. Proportions of these youth will likely increase under the new amendments. If textual information is to be useful, it must realistically reflect the literacy level of the target population.

While experiential learning must be pursued more aggressively, firsthand experience cannot reveal more than a small fraction of the spectrum of occupations. Youth rely on secondary resources to offer that breadth. Therefore, it is imperative that DOL continue to expand the range and simplify the use of written, audio, visual and computerized information concerning careers and planning. A good example is DOL's recent move to install the Dictionary of Occupational Titles (DOT) in an electronic data base, where it can be accessed quickly and easily.[24]

e) ***Placement of Career Information in a Meaningful Context*** — One of the greatest problems observed in existing career guidance programs is the mindless presentation of disembodied information devoid of counseling and guidance. Active guidance from a counselor, coach or mentor is what makes the difference in young people's lives. Active guidance helps youth build a personal context in which information can be applied.

Devoid of interpretation, information can be worse than useless--in that it can delude youth into thinking they are equipped to make decisions. Too often, occupational and vocational "guidance" materials are provided independent of a meaningful framework, devoid of explanation or counsel--the very tools needed to put this information to use. Guidance personnel, counselors, mentors and others must assist youth in integrating career information into their own lives, thus providing them with the tools and skills to make meaningful decisions based on a personal understanding of themselves and an objective understanding of occupa-

24. At present, DOT comes in two intimidating volumes that together are seven inches thick. Computer-based career guidance programs, video libraries and "tele-video visits" to worksites offer other mediums that should be pursued more aggressively.

tional and career information. Such efforts are inevitably labor intensive, and will require significant increases in human resources.

4. **Modify and expand the Youth Employment Competencies to more fully reflect the breadth of career guidance competencies.** Wisdom urges the continued development and implementation of measurable performance standards. Both NOICC and JTPA have been moving in this direction. The Career Development Competencies developed by NOICC provide a comprehensive collection that should be grafted onto/into emploment/training programming. Through the Pre-employment and Work Maturity Competencies, JTPA currently addresses some, but not all of the key competency standards established in NOICC's Career Development Guidelines. DOL should continue to pursue integration and compliance.

   Local programs must also administer an initial assessment that gauges the participants' competencies at intake in order to properly measure and track progress and career development. Construction of standard measures that can be readily used throughout the JTPA system will allow direct measurement of program effects on developmental outcomes.

   Research from the field of career development indicates that job placement alone is an inappropriate measure of youth program success. Likewise, there is widespread agreement on restructuring program services around the development and mastery of measurable competencies. Exemplary programs make use of portfolios and other forms of individualized career planning systems to track student progress and program effectiveness. DOL should support efforts to investigate and develop alternative assessment strategies to better measure individual career development. Such standards would produce tighter linkages between program funding and authentic outcomes, which in turn should lead to the intended and long-term benefits promised by career guidance.

5. **Strengthen the role of the Job Service in providing career guidance.** JTPA might supplement its career services by drawing on resources offered by the Job Service. The primary handicap of JTPA is that it must, by Congressional mandate, focus resources on training the economically disadvantaged (and increasingly, those with multiple handicaps to employment) for entry-level jobs. The Job Service, however, should be well-suited to providing career guidance to a broader target population. Assessment, testing, referral and counseling on labor market information and job placement is what the Job Service was designed for.

   In earlier years, Job Service counselors visited the schools on a regular basis to counsel high school juniors and seniors about imminent career decisions, employment opportunities, training requirements and referrals. That practice, along with a complementary role for JTPA, could markedly increase the presence and effectiveness of career guidance activities, particularly in schools that serve large numbers of disadvantaged youth.

Bibliography

American Counseling Association
1992 *The School Counselor and Comprehensive Programs for Work-Bound Youth.* A Position Paper of the ACA. Alexandria, Va.: American Counseling Association.

Archer, Elayne
1989 *Partnerships for Learning: School Completion and Employment Preparation in the High School Academies.* New York: Academy for Educational Development, Inc.

Barnes, Robert W.
1984 *An Evaluation of the Youth Awareness Program (YAP), School Year 1983-84.* Washington, D.C.: District of Columbia Schools.

Barton, Paul E.
1990 *From School to Work. Policy Information Report.* Princeton, N.J.: ETS Policy Information Center.

Barton, Paul E.
1991 "The School-to-Work Transition." *Issues in Science and Technology,* 7(3):50-54.

Benson, Charles S.; Mitchell, Vernay and Russell, Ellen S.
1990 *Exemplary Urban Career-Oriented Secondary School Programs.* Berkeley, Calif.: National Center for Research in Vocational Education.

Berkeley Planning Associates and Public/Private Ventures
Forthcoming *Youth in JTPA.* Final Report.

Berney, Tomi D. and Hriskos, Constantine
1990 *Harmony in Career Learning and Scholastic System: Project Hi-Class 1988-89.* OREA Evaluation Section Report. Brooklyn, N.Y.: New York City Board of Education.

Bidwell, Charles; Csikszentmihalyi, Mihaly; Hedges, Larry and Schneider, Barbara
1992 *Studying Career Choice. Volume I.* Chicago: University of Chicago/NORC.

Bingaman, David E.
1987 *Career Counseling and Development. Course of Study, Grades 6, 7, 8.* Selinsgrove, Pa.: U.S. Department of Education, Office of Educational Research and Improvement.

Bishop, John
1988 *The Impact of High School Vocational Education: A Review with Recommendations for Improvement.* Prepared for Research for Better Schools. Ithaca, N.Y.: New York State School of Industrial and Labor Relations, Cornell University.

Bloch, Deborah Perlmutter
1988 *Reducing the Risk: Using Career Information with At-Risk Youth.* Eugene, Ore.: National Career Information System.

Bloch, Deborah Perlmutter
1989 "Using Career Information with Dropouts and At-Risk Youth." *The Career Development Quarterly*, 38(December):160-170.

Borus, Michael E. and Carpenter, Susan A.
1984 "Choices in Education," in Michael E. Borus (ed.), *Youth and the Labor Market, Analyses of the National Longitudinal Survey.* Kalamazoo, Mich.: W.E. Upjohn Institute for Employment Research.

Brandt, Richard M.
1990 *A Close-Up Look: Third-Party Evaluation of Program Components.* Paper presented at the Annual Meeting of the American Educational Research Association, Boston.

Brown, Duane; Minor, Carole W. and Jepsen, David A.
1991 "The Opinions of Minorities about Preparing for Work: Report of the Second NCDA National Survey." *The Career Development Quarterly*, 40(1):5-19.

Bucknam, Ronald B. and Brand, Sheara G.
1983 "EBCE Really Works." *Educational Leadership*, 40(6):66-71.

Business Advisory Commission of the Education Commission of the States
1985 *Reconnecting Youth.* Denver, Colo.: Education Commission of the States.

Campbell, Robert E.; Connell, Janie B.; Boyle, Karen Kimmel and Bhaerman, Robert D.
1983 *Enhancing Career Development: Recommendations for Action. A Review of Empirical Studies of the Effects of Career Guidance.* Columbus, Ohio: National Center for Research in Vocational Education.

Carnevale, Anthony P.; Gainer, Leila J. and Meltzer, Ann S.
1990 *Workplace Basics: The Skills Employers Want.* San Francisco, Calif.: Jossey-Bass.

Chapman, Warren and Katz, Martin
1983 "Career Information Systems in Secondary Schools: A Survey and Assessment." *The Vocational Guidance Quarterly*, March, 165-177.

Chapman, Warren and Katz, Martin
1981 *A Survey of Career Information Systems in Secondary Schools. Final Report of Study 1.* Princeton, N.J.: Educational Testing Service.

Charner, Ivan and Fraser, Bryna Shore
1987 *Youth and Work: What We Know, What We Don't Know, What We Need to Know.* Washington, D.C.: William T. Grant Foundation.

Ciavarella, Michael A.
1987 *A Plan to Implement the Recommendations of Counseling Personnel Who Participated in Six Pennsylvania Regional Workshops Designed to Update Counselors' Competencies and Skills in the Area of Career Guidance.* Final Report. Harrisburg, Penna.: U.S Department of Education, Office of Educational Research and Improvement.

Clinton, William
1991 "Apprenticeship American Style." *Vocational Education Journal,* 66(7):22-23.

Colorado State Community College and Occupational Education System
1987 *Career Development Guidelines. A Handbook for Program Planning and Review--Five Phases Focusing on Individual Student Competencies with Suggested Activities and Counselor-Team Counseling and Placement Program Strategies, for All Students 9-12.* Denver, Colo.: U.S. Department of Education, Office of Educational Research and Improvement.

Commission on Pre-College Guidance and Counseling
1986 *Keeping the Options Open.* New York: College Entrance Examination Board.

Cook, Ellen Piel
1991 "Annual Review: Practice and Research in Career Counseling and Development, 1990." *The Career Development Quarterly,* 40(2, December):99-131.

Council of Chief State School Officers
1991 *Connecting School and Employment.* A Policy Paper of the Council of Chief State School Officers. Washington, D.C.: Council of Chief State School Officers.

Coy, Doris
1991 "The Role of the Counselor in Today's Schools." *NASSP Bulletin,* April.

Crites, John O.
1987 *Evaluation of Career Guidance Programs: Models, Methods, and Microcomputers. Information Series No. 317.* Columbus, Ohio: National Center for Research in Vocational Education, Ohio State University.

Crites, John O.
1981 *Career Counseling: Models, Methods, and Materials*. New York: McGraw-Hill.

Crites, John O.
1969 *Vocational Psychology*. New York: McGraw-Hill.

D'Andrea, Michael and Daniels, Judy
1992 "A Career Development Program for Inner-City Black Youth." *The Career Development Quarterly*, 40(March):272-280.

de Lone, Richard
1992 "School-to-Work Transition: Failings, Dilemmas, and Policy Options," in *Dilemmas in Youth Employment Programming: Findings From the Youth Research and Technical Assistance Project, Volume I*, pp. 223-292. Washington, D.C.: U.S. Department of Labor.

Dedmond, Rebecca
1991 "Establishing, Coordinating School-Community Partnerships." *NASSP Bulletin*, April, 28-35.

Employment and Training Reporter
1992 "Half the States Already Use Voc Ed Performance Measures, NCRVE Finds." *Employment and Training Reporter*, 23 (48, August 19):974. Washington, D.C.: MII Publications.

Employment and Training Reporter
1992 "Rich-Poor Gap Increases, Report Finds." *Employment and Training Reporter*, 24(1, September 9):9. Washington, D.C.: MII Publications.

Educational Testing Service
1990 *Beyond High School: The Transition to Work*. Princeton, N.J.: Educational Testing Service.

Freedman, Marc
1992 *The Kindness of Strangers: Reflections on the Mentoring Movement*. Philadelphia: Public/Private Ventures.

Fretz, B.F.
1981 "Evaluating the Effectiveness of Career Interventions." *Journal of Counseling Psychology Monograph*, 28(1, January):77-87.

Gallup Organization, Inc.
1989 *National Survey of Working America*. Conducted for the National Career Development Association. Princeton, N.J.: Gallup Organization, Inc.

Ginzberg, E.
1972 "Restatement of the Theory of Occupational Choice." *Vocational Guidance Quarterly*, 20(3):169-176.

The William T. Grant Foundation, Commission on Work, Family and Citizenship
1988 *The Forgotten Half: Non-College Youth in America. Interim Report.* Washington, D.C.: William T. Grant Foundation.

Grantham, Robert J. and Gordon, Myra
1983 *A Summary of Project Open Horizons, Phase I. Implementation and Data Analysis.* Buffalo, N.Y.: Tefco Services, Inc.

Grover, Herbert J.
1992 *Marketing and Implementation of New Approaches to Career Counseling and Guidance.* Madison, Wis.: Wisconsin Department of Public Instruction.

Grubb, W. Norton
1992 *Assessing the Coordination of Vocational Education With Other Federal Programs. Working Paper of the NCRVE.* Berkeley, Calif.: National Center for Research in Vocational Education.

Gysbers, Norman C.; Hughey, Kenneth F.; Starr, Marion and Lapan, Richard T.
1992 "Improving School Guidance Programs: A Framework for Program, Personnel, and Results Evaluation." *Journal of Counseling and Development,* 70(May/June):565-570.

Harp, Lonnie
1992 "Scuttled Program's Work, Skill Themes Enjoying Resurgence." *Education Week,* 12(3, 23 September):1,13.

Henderson, Deborah R.
1989 *Project WorkAbility: California's Successful Transition Program for Secondary Students.* Sacramento, Calif.: U.S. Department of Education, Office of Educational Research and Improvement.

Herr, Edwin L.
1979 *The Outcomes of Career Guidance: Some Current and Future Perspectives.* Paper presented at the American Educational Research Association Annual Meeting. San Francisco, Calif.

Herr, Edwin L. and Cramer, Stanley H.
1992 *Career Guidance and Counseling Through the Lifespan. Fourth Edition.* New York: Harper Collins.

Hopkins, Valorie; Kinnison, Joyce; Morgenthau, Eleanor and Ollis, Harvey
1992 *Career Information Delivery Systems: A Summary Status Report.* NOICC Occasional Paper No. 4. Washington, D.C.: National Occupational Information Coordinating Committee.

Hotchkiss, Lawrence and Vetter, Louise
1987 *Outcomes of Career Guidance and Counseling.* Columbus, Ohio: National Center for Research in Vocational Education.

Hoyt, Kenneth B.
Forthcoming *Youth Apprenticeship "American Style" and Career Development.* Unpublished manuscript.

Hoyt, Kenneth B.
Forthcoming *Career Education: A Vital Component in the Transition of Youth from Schooling to Employment.* Unpublished manuscript.

Hoyt, Kenneth B.
1991a "Collaboration: The Key to Success in Private Sector/Education System Relationships." *Future Choices*, 3(2):39-44.

Hoyt, Kenneth B.
1991b "Testimony Prepared for Presentation to the Committee on Education and Labor, U.S. House of Representatives, November 15, 1989." *Future Choices*, 3(2):45-47.

Hoyt, Kenneth B.
1978 *National Alliance of Business and Career Education. Monographs on Career Education.* Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement.

Johnston, William B. and Packer, Arnold H.
1987 *Workforce 2000: Work and Workers for the Twenty-First Century.* Indianapolis, Ind.: Hudson Institute.

Kapes, J.T.; Borman, C.A. and Frazier, N.
1989 "An Evaluation of the SIGI and Discover Microcomputer-Based Career Guidance Systems." *Measurement and Evaluation in Counseling and Development*, Vol. 22:126-136.

King, F.J.; Smith-Dann, Janice; Schwallie-Giddes, Patricia; Rogers, Zelda and Kidney, Richard
1988 *Evaluation of the ASVAB Career Development Program. Final Report.* Tallahassee, Fla.: Florida State Department of Education.

Kinoshita, Daniel Y.
1987 *Vol. 1 of Vocational Education and the JTPA: Assessing the Partnership.* Honolulu, Hawaii: State Council on Vocational Education.

Kirsch, Irwin; Jungeblut, Ann and Campbell, Anne
1992 *Beyond the School Doors: The Literacy Needs of Job Seekers Served by the U.S. Department of Labor.* Washington, D.C.: U.S. Department of Labor, Employment and Training Administration.

Knepper, Gary
1988 *Project ARJO: Academic Recovery Through Job Opportunity. A Report on the Second Year of Operation.* Washington, D.C.: U.S. Department of Education.

Krieshok, Thomas S.
1987 *Assessment of Adolescent Career Interests and Values.* New York: U.S. Department of Education, Office of Educational Research and Improvement.

Krumboltz, John D.
1979 "A Social Learning Theory of Career Decision Making," in *Social Learning and Career Decision-Making*, G.G. Jame, J.D. Krumboltz and A.M. Mitchell (eds.), pp. 19-49. Cranston, R.I.: Carrole Press.

Krumboltz, John D. and Hamel, Daniel A.
1982 *Assessing Career Development.* Palo Alto, Calif.: Mayfield.

Krumboltz, John D. and Nichols, Charles W.
1990 "Integrating the Social Learning Theory of Career Decision-Making," in *Career Counseling*, W. Bruce Walsh and Samuel H. Osipow (eds.), pp. 159-192. Hillsdale, N.J.: Lawrence Erlbaum Associates.

Lerman, Robert I.
1992 "Youth in the Nineties: Recent Trends and Expected Patterns," in *Dilemmas in Youth Employment Programming: Findings From the Youth Research and Technical Assistance Project, Volume II*, pp. 193-244. Washington, D.C.: U.S. Department of Labor.

Lewis, Morgan V.
1987 *Vocational Education/Job Training Partnership Act Coordination. Second Annual Report.* Columbus, Ohio: the National Center for Research in Vocational Education, the Ohio State University.

Loughead, Teri A.; Liu, Shu-hui; Middleton, Eric B. and Haring, Marilyn
1992 *Career Development for At-Risk Youth: A Quantitative and Qualitative Program Evaluation.* Paper presented at the American Educational Research Association Annual Meeting, San Francisco, Calif.

Maguire, L.
1975 *Experience-Based Career Education.* Philadelphia: Research for Better Schools.

Maine State Department of Educational and Cultural Services
1991 *Building Blocks for the Future. Kindergarten-Grade 12. A Developmental Framework for Life Choices. Maine Guide.* Augusta, Maine: U.S. Department of Education, Office of Educational Research and Improvement.

Mangum, Garth L.
1992 "Myths and Realities of Job Training 2000." *Future Choices*, 4(1):27-34.

Mangum, Garth L.
1978 *Career Education and the Comprehensive Employment and Training Act.* Stock Number: 017-080-01862-4. Washington, D.C.: Office of Career Education, U.S. Government Printing Office.

Mangum, Stephen L.
1991 "Career Education: An Opportunity Lost." *Future Choices*, 3(2):31-38.

Markey, James P.
1988 "The Labor Market Problems of Today's High School Dropouts." *Monthly Labor Review*, June, 36-43.

McAuliffe, Garrett J.
1988 *Outcomes of a Group Career Planning Process.* Occasional Paper No. 126. Columbus, Ohio: The National Center for Research in Vocational Education, The Ohio State University.

McKinlay, Bruce and Bloch, Deborah Perlmutter
1989 *OSSC Bulletin* 32(5). *Career Information Motivates At-Risk Youth.* Eugene, Ore.: Oregon School Study Council, University of Oregon.

Meissner, Margit
1988 *Montgomery County Public Schools Summer VIEW Program: A Transition-to-Work Program for Special Education Students Funded Through the Job Training Partnership Act. Final Report.* Rockville, Md.: Montgomery County Public Schools.

Miller, Juliet V.; Goodman, Jane and Collision, Brooke
1991 *The National Career Development Guidelines: Progress and Possibilities.* NOICC Occasional Papers/3. Washington, D.C.: National Occupational Information Coordinating Committee.

Miller, Juliet V.
1991 "Lessons from the Local Pilot Sites," in *The National Career Development Guidelines: Progress and Possibilities*, pp. 7-24. Washington, D.C.: National Occupational Information Coordinating Committee.

Mitchell, A.M.
1977 *Career Development Needs of Seventeen Year Olds: How to Improve Career Development Programs.* Washington, D.C.: National Advisory Committee for Career Education.

National Alliance of Business
1986 *Employment Policies: Looking to the Year 2000.* Washington, D.C.: National Alliance of Business.

National Career Development Association
1991 *Position Paper.* Approved by the NCDA Board of Directors, January 11.

National Commission on Secondary Vocational Education
1985 *The Unfinished Agenda: The Role of Vocational Education in the High School.* Columbus, Ohio: Ohio State University, National Center for Research in Vocational Education.

National Occupational Information Coordinating Committee
1992 *The National Career Development Guidelines.* Washington, D.C.: National Occupational Information Coordinating Committee.

National Occupational Information Coordinating Committee
Undated *Career Development Awareness Guide.* Washington, D.C.: National Occupational Information Coordinating Committee.

Niles, S.G. and Herr, E.L.
1989 "Using Secondary School Behaviors to Predict Career Behaviors in Young Adulthood: Does Success Breed Success?" *Career Development Quarterly*, 37:345-354.

Oklahoma State Department of Vocational and Technical Education Research Division
1991 *Educating Counselors in Vocational Guidance: The Process and the Outcomes in Oklahoma.* Stillwater, Okla.: Oklahoma State Department of Vocational and Technical Education.

Oregon State Department of Education
1992 *New Career Paths Through Youth Apprenticeship.* Proposal. Salem, Ore.: Oregon Department of Education.

Oregon State Department of Education
1988 *Integrating Oregon Career Information Materials into Comprehensive Career Development, Guidance and Counseling Programs. A Training Guide for High School Counselors, Teachers and Administrators.* Salem, Ore.: U.S. Department of Education, Office of Educational Research and Improvement.

Orgain, Linda S.
1991 *The High School Development Center: An Evaluation and Lessons from a Dropout Prevention Program of the Detroit Public Schools.* A Program Report of the Skillman Foundation. Detroit, Mich.: Moore and Associates.

Osipow, Samuel H.
1973 *Theories of Career Development. Second Edition.* Englewood Cliffs, N.J.: Prentice-Hall.

Packer, Arnold H.
1992 "School to Work: Helping Students Learn a Living." *Education Week*, May 27, p. 28.

Parrott, Charlene
1989 *Common Threads for the Future: Michigan Exemplary Career Guidance Programs (Farmington Public Schools' K-12 Career Development Program).* Farmington Hills, Mich.: U.S. Department of Education, Office of Educational Research and Improvement.

Parsons, Frank
1909 *Choosing a Vocation.* Boston, Mass.: Houghton Mifflin.

Pendergrass, John; Carter, Nancy and Douglas, Marcia
1981 *Idea Book: Meeting the Occupational Information Needs of Disadvantaged Youth.* Portland, Ore.: Northwest Regional Educational Laboratory.

Pinson, N.; Gysbers, Norman and Drier, H.
1981 *Strengthening Work-Related Education and Training in the 1980s Through Improved Guidance Programs.* Washington, D.C.: the National Guidance Association and the Guidance Division of the American Vocational Association.

Prediger, Dale J.; Roth, J.D. and Noeth, R.J.
1973 *Nationwide Study of Student Career Development: Summary of Results.* Iowa City, Iowa: American College Testing Program, Research and Development Division.

Prediger, Dale J. and Sawyer, Richard L.
1986 "Ten Years of Career Development: A Nationwide Study of High School Students." *Journal of Counseling and Development*, 65(September):45-49.

Raskin, Patricia M.
1987 *Vocational Counseling: A Guide for the Practitioner.* New York: Teachers College Press.

Raynor, J.O. and Entin, E.E.
1982 *Motivation, Career Striving, and Aging.* New York: Hemisphere.

Reisner, Elizabeth R. and Balasubramaniam, Meena
1989 *School-To-Work Transition Services For Disadvantaged Youth Enrolled in Vocational Education.* Prepared for the National Assessment of Vocational Education. Washington, D.C.: Policy Studies Associates, Inc.

Research and Policy Committee of the Committee for Economic Development
1985 *Investing in Our Children, Business, and Public Schools.* New York: Committee for Economic Development.

Salganik, Laura H.; Banks, Karen E. and Burner, Lori A.
1990 *Maryland's Tomorrow: Making a Difference.* A Report Prepared for Johns Hopkins University Institute for Policy Studies. Washington, D.C.: Pelavin Associates, Inc.

The Secretary's Commission on Achieving Necessary Skills (SCANS)
1991 *What Work Requires of Schools. A SCANS Report for America 2000.* Washington, D.C.: U.S. Department of Labor.

Sewell, Trevor E.; Palmo, A.J. and Manni, J.L.
1981 "High School Dropout: Psychological, Academic, and Vocational Factors." *Urban Education*, 16(1, April):65-76.

Smith, Thomas J. and Gambone, Michelle Alberti
1992 "Effectiveness of Federally Funded Employment Training Strategies for Youth," in *Dilemmas in Youth Employment Programming: Findings from the Youth Research and Technical Assistance Project, Vol. I.* Washington, D.C.: U.S. Department of Labor.

Smith, Thomas J.; Moorhouse, Mary and Trist, Carolyn
1988 *A Practitioner's Guide: Strategies, Programs, and Resources for Youth Employability Development.* Philadelphia, Penna.: Public/Private Ventures.

Sonnenfeld, J. and Kotter, J.P.
1982 "The Maturation of Career Theory." *Human Relations*, 35(1):19-46.

South Carolina State Department of Education
1989 *The South Carolina Comprehensive Career Guidance Program for Grades K-12.* Columbia, S.C.: U.S. Department of Education, Office of Educational Research and Improvement.

Splete, Howard and Miller, Juliet
1981 "Research and Evaluation on Counseling for Career Development." *Personnel and Guidance Journal*, April, 526-530.

Splete, Howard and Stewart, Amy
1990 *Competency-Based Career Development Strategies and the National Career Development Guidelines.* Columbus, Ohio: ERIC Clearinghouse on Adult, Career, and Vocational Education. Center on Education and Training for Employment, the Ohio State University.

Spokane, Arnold R.
1991 *Career Intervention.* Englewood Cliffs, N.J.: Prentice-Hall.

Spokane, Arnold R. and Hawks, Brenda K.
1990 "Annual Review: Practice and Research in Career Counseling and Development, 1989." *The Career Development Quarterly*, 39(2):98-128.

Spokane, Arnold R. and Oliver, L.W.
1983 "The Outcomes of Vocational Intervention," in S.H. Osipow and W. B. Walsh (eds.), *Handbook of Vocational Psychology*. Vol. 2. Hillsdale, N.J.: Lawrence Erlbaum Associates.

Sternberg, Judy
1987 *Livonia Public Schools. Common Threads for the Future. Michigan Exemplary Career Guidance Programs*. Livonia, Mich.: U.S. Department of Education, Office of Educational Research and Improvement.

Super, Donald E.
1983 "Assessment in Career Guidance: Toward Truly Developmental Counseling." *Personnel and Guidance Journal*, 61(9):555-562.

Super, Donald E.
1976 "Career Education and the Meaning of Work," in *Monographs on Career Education*. Washington, D.C.: U.S. Department of Education, Office of Career Education.

Super, Donald E.
1974 "The Broader Context of Career Development and Vocational Guidance," Chapter 3 in *Vocational Guidance and Human Development*, Edwin L. Herr (ed.). Boston, Mass.: Houghton Mifflin.

Super, Donald E.
1957 *The Psychology of Careers*. New York: Harper and Row.

Tindall, Lloyd
1988 *Retaining At-Risk Students: The Role of Career and Vocational Education*" Information Series No. 335. Columbus, Ohio: ERIC Clearinghouse on Adult, Career, and Vocational Education Project. the Center on Education and Training for Employment.

Tittle, Carol Kehr
1982 "Career Guidance: Program Evaluation and Validity." *Measurement and Evaluation in Guidance*, 15(1):22-25.

U.S. Department of Labor
1992 *The School-to-Work Connection*. Washington, D.C.: U.S. Department of Labor, Employment and Training Administration.

U.S. Department of Labor
1989 *Work-Based Learning: Training America's Workers*. Washington, D.C.: U.S. Department of Labor, Employment and Training Administration.

U.S. General Accounting Office
1989 *Vocational Education: Opportunity to Prepare for the Future.* HRD-89-55 Report to the Chairman, Subcommittee on Elementary, Secondary and Vocational Education, Committee on Education and Labor, House of Representatives. Washington, D.C.: U.S. General Accounting Office.

Virginia Polytechnic Institute and State University
1983 *Exemplary Vocational Guidance Projects in Virginia (1983-84 Project Abstracts).* Blacksburg, Va.: U.S. Department of Education, Office of Educational Research and Improvement.

Vondracek, Fred W.; Lerner, Richard M. and Schulenberg, John E.
1986 *Career Development: A Life-Span Developmental Approach.* Hillsdale, N.J.: Lawrence Erlbaum Associates.

Walling, Russell; Schacht, Arlene and Beltle, Richard
1991 *A New Jersey Comprehensive Career Development Program Model.* Neptune, N.J.: Neptune Township Public Schools.

Walsh, W. Bruce and Osipow, Samuel H.
1990 *Career Counseling: Contemporary Topics in Vocational Psychology.* Hillsdale, N.J.: Lawrence Erlbaum Associates.

Wirtz, Willard
1975 *The Boundless Resource: A Prospectus for an Education-Work Policy.* Washington, D.C.: New Republic Book Company.

Yost, Elizabeth B. and Corbishley, M. Anne
1987 *Career Counseling: A Psychological Approach.* San Francisco, Calif.: Jossey-Bass.